TRAVELLER

EXPLORER'S EDITION

SCIENCE FICTION ADVENTURE IN THE FAR FUTURE

TRAVELLER

TRAVELLER EXPLORER'S EDITION

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On our small planet, at this moment, here we face a critical branch point in history. What we do with our planet, right now, will propagate down through the centuries and powerfully affect the destiny of our descendants.

It is well within our power to destroy our civilisation and, perhaps, our species as well. If we capitulate to superstition, greed or stupidity, we can plunge our world into a darkness deeper than the time between the collapse of classical civilisation and the Italian renaissance.

But we are also capable of using our compassion and our intelligence, our technology and our wealth, to create an abundant and meaningful life for every inhabitant of this planet. To enhance enormously our understanding of the universe, and to carry us to the stars...

- Carl Sagan, Cosmos

INTRODUCTION

Welcome to the far future! *Traveller* is a roleplaying game that handles any kind of science fiction setting, from cyberpunk worlds to space opera. The *Traveller Explorer's Edition* is designed to introduce new players to the game using just one of its many genres: the exploration campaign.

Humanity has gone to the stars and found them populated by alien life forms and sentient species. Science and technology have advanced far beyond that of the present day. While the mighty Imperium unites thousands of worlds under a single rule across the vast reaches of Charted Space, this introduction to the game takes the story to the frontiers, the bleeding edge of the Imperial advancement, where unvisited stars and planets await.

Most participants in a *Traveller* game will be players. Each player generates a character using the *Traveller* Creation rules; that character becomes the player's avatar in the game world and is called a Traveller. Travellers are the protagonists of the game and scenarios revolve around their adventures and actions. The terms player and Traveller are synonymous. Characters are controlled by the Referee rather than the players – what are often called non-player characters. However, the same rules apply to both Travellers and characters.

The Referee describes the worlds the Travellers visit, presenting them with challenges and dangers, and playing the roles of the supporting cast and antagonists. The Referee creates the basic outline of the adventures that the Travellers encounter and resolves the results of their actions using the rules in this book as a guideline.

Traveller has adventures and campaigns. An adventure takes one or more game sessions to complete and might be a one-off scenario or an episode of a campaign. A campaign is a series of adventures, charting the continuing escapades of a group of Travellers, and is the most common form of *Traveller*. In either case, the Travellers embark on a journey or scenario overseen by the Referee who determines what dangers the Travellers face, from hostile aliens and criminals to solar flares and robots or political intrigue and espionage. The Travellers decide how they react and overcome obstacles put in their way.

GAME CONVENTIONS

Traveller uses two six-sided dice to resolve actions but some situations involve fewer or more dice.

1D/2D: *Traveller* often uses the abbreviation '2D'. 'Roll 2D' means 'roll two six-sided dice and add them together'. You may also see '1D', '3D' or other numbers of 'D', instructing you to roll the specified number of dice and adding them together to gain the final result. If a + or - appears after the dice abbreviation, add or subtract the number shown to the total rolled. For example, 2D+3 or 3D-2.

D3: Treat the dice as if they have only three sides each, by dividing the number rolled by two and rounding upwards. So, a roll of 1–2 means one, a roll of 3–4 means two and a roll of 5–6 means three.

D66: Nominate one die as the 'tens' die and one as the 'units' die, to give you a two-digit number between 11 and 66, giving you a total of 36 possible outcomes.

Rolls and Checks: To determine if a Traveller succeeds or fails at a task, you must make a roll. After rolling 2D and adding Dice Modifiers, if the total is equal to or greater than the target number, they succeed. For example, when asked to roll for STR 10+, roll two dice, add your Strength modifier and get 10 or higher to succeed. A check is the same as a roll but the Dice Modifier is always from a characteristic or skill. For most characteristic or skill checks, you must get an eight or more after Dice Modifiers have been applied in order to succeed.

Dice Modifier (DM): A number to be applied to a dice roll before it is made. Dice Modifiers are always followed by a sign, indicating the number to be added to or subtracted from the roll. For example, DM-2 means subtract two from the roll; DM+4 means that four is added to the roll. Unless otherwise stated, whenever you are asked to divide in *Traveller*, always round down.

TRAVELLER CREATION

In *Traveller*, you start off as an 18 year old, decide what kind of career to pursue and then watch as your Traveller's life unfolds. The *Traveller Explorer's Edition* provides two careers: Scout and Scholar, both of which are ideal for exploration adventures and campaigns. For a larger range of careers, refer to the *Traveller Core Rulebook*.

When you have finished this process, you will have a Traveller with a history and full career (successful or otherwise) behind them. They are now be ready for the next phase of their life, one full of excitement and adventure.

CHARACTERISTICS

Every Traveller has characteristics that describe their mental and physical potential. Roll 2D six times and assign the scores in any order you wish to the following six characteristics, recording them on your character sheet.

Strength (STR): Physical strength, fitness and forcefulness.
Dexterity (DEX): Physical coordination, agility and reflexes.
Endurance (END): Stamina, determination and ability to sustain damage.
Intellect (INT): Intelligence and quickness of mind.
Education (EDU): A measure of a Traveller's learning and experience.
Social Standing (SOC): A Traveller's place in society.

Each characteristic has a Dice Modifier (DM) shown on the table here.

Characteristic Modifiers	Characteristic Score Dice Modifier
0	-3
1–2	-2
3–5	-1
6–8	+0
9–11	+1
12–14	+2
15+	+3

As you progress through your career, your characteristics may change. The maximum score for a characteristic is 15 for an unaugmented Traveller.

SKILLS

Skills are obtained over the course of a career and are discussed in detail on page 17. A Traveller's proficiency in any skill is denoted by their level in that skill.

BACKGROUND SKILLS

Before embarking on a career, you receive a number of background skills equal to your EDU DM +3 (so, 0 to 5, depending on your EDU score), chosen from the list here. This represents the knowledge you have picked up during adolescence.

Admin 0, Animals 0, Art 0, Athletics 0, Carouse 0, Drive 0, Electronics 0, Flyer 0, Language 0, Mechanic 0, Medic 0, Profession 0 Science 0, Seafarer 0, Streetwise 0, Survival 0, Vacc Suit 0,

CAREERS

Next, your Traveller engages in one or more career terms, representing their experiences and adventures before the start of the campaign. Each term lasts for four years, even if a Traveller fails a Survival roll or is forced to leave the career.

At many points during a career, a Traveller must make a dice rolls. Many of these are based on characteristics – simply roll 2D, add the DM from the listed characteristic and try to get a total higher than or equal to the listed value. For example, a roll of INT 8+ means 'roll 2D, add your Intellect DM and you succeed if you roll an 8 or more'. Some rolls are skill checks, where you add any levels in that skill. For example, a roll of Gun Combat 8+ would mean 'roll 2D, add your Gun Combat skill level and get 8 or more to succeed'. Note that later in the rules, you are able to add further modifiers to checks like this (for example, when using the Gun Combat skill to shoot, you can often add your DEX DM). However, these other modifiers are never applied during Traveller Creation.

In each career, there are three assignments, representing different aspects of the career. Pick one of these assignments when you enter the career.

CAREER DESCRIPTIONS

Each career has the following sections:

SKILLS AND TRAINING

Each career has four or five skill tables associated with it – Personal Development, Service Skills, Assignment Skills (divided into three sub-tables corresponding to assignments) and Advanced Education. In each term, pick one of these tables and roll 1D to see which skill you increase. You may only roll on the Advanced Education table if you have the listed requirement (EDU 8 in the Scouts and EDU 10 in the Scholar career).

Skills can be listed with or without an associated level. If no specific level is listed, then you gain that skill at level 1 if you do not have it already or increase its level by +1 if you are already trained in that field. If a level is listed, then you gain the skill at that level so long as it is higher than your current level in the skill. For example, Gambler 0 would mean you receive the Gambler skill at level 0. This is of benefit to you only if you have no Gambler skill. Vacc Suit means you increase your Vacc Suit skill by +1 or gain it at level 1 if you have no Vacc Suit skill to begin with. If you have Vacc Suit 0, it increases to 1, if you have Vacc Suit 2 it rises to 3 and so forth. Streetwise 1 would mean you get the Streetwise skill at level 1. If your Streetwise skill is already 1 or more, then this is of no benefit to you. If you have no Streetwise skill, or it is only at 0, you jump straight to Streetwise 1.

A skill cannot be increased beyond level 4 during Traveller Creation. Once a skill has reached level 4, additional increases are lost. In addition, a Traveller may never have a total number of skill levels higher than three times their combined INT and EDU.

For your first term, instead of rolling for a skill, you get all the skills listed on the Service Skills table at level 0 as your basic training.

SURVIVAL

Each career has a survival roll. If you fail this roll, you must immediately roll on the Mishap table for the career. This mishap forces you to leave the career immediately unless otherwise stated. You also lose the Benefit roll for the current term. A natural 2 on the survival roll is always a failure.

EVENTS

If you are still in your career after resolving the survival roll, roll on the career's Events table to see what interesting things befall you this term.

ADVANCEMENT

Each career has an advancement roll to represent your successful (or otherwise) path through the career, starting from rank 0. If you make a successful advancement roll, move to the next rank and gain an extra roll on any of the skill tables available for your career. You also get any bonuses listed for your new rank. You may only attempt to advance once per term. If your advancement roll is equal to or less than the number of terms you have spent in this career, then you cannot continue in this career after this term. If you roll a natural 12, then you must continue in this career. You are too valuable to lose and will be strong-armed into staying. Some ranks have extra skills associated with them. These are acquired immediately upon attaining the rank.

BENEFITS

When you leave a career, you gain material benefits, representing money, equipment and influence acquired during your years of work. Benefits are described fully on page 10.

THE CONNECTIONS RULE

During Traveller Creation, one aim is to ensure the Travellers know one another before the adventure or campaign begins. If two Travellers agree, then any event rolled for one Traveller can involve another. After linking events between two Travellers, they both get one extra skill of their choice. Each Traveller may gain a maximum of two free skills from the connections rule and each connection must be with a different Traveller. For each connection, you may gain any skill except Jack-of-all-Trades and cannot bring a skill above level 3.

For example, Erik is working as a Scholar and he rolls a secret project (event number 4 on the Scholar Events table). Erik suggests that his Traveller could have met Kathya's Traveller while on this project and Kathya agrees. They discuss exactly what happened during the mission and this begins to form previous history for both Travellers. Both Erik and Kathya then gain an extra skill because of this.

1 SCHOLAR

Individuals trained in technological or research sciences who conduct scientific investigations into materials, situations and phenomena, or who practise medicine.

ASSIGNMENTS

Choose one of the following:

Field Researcher: You are an explorer or field researcher, equally at home in the laboratory or wilderness.
Scientist: You are a researcher in some corporation or research institution or a mad scientist in an orbiting laboratory.
Physician: You are a doctor, healer or medical researcher.

CAREER PROGRESS

	SURVIVAL	ADVANCEMENT
Field Researcher	END 6+	INT 6+
Scientist	EDU 4+	INT 8+
Physician	EDU 4+	EDU 8+

MUSTERING OUT BENEFITS

1D	CASH	BENEFITS
1	Cr5000	INT +1
2	Cr10000	EDU +1
3	Cr20000	Two Ship Shares
4	Cr30000	SOC +1
5	Cr40000	Scientific Equipment
6	Cr60000	Scout Ship
7	Cr100000	Scout Ship

SKILLS AND TRAINING

1D	PERSONAL DEVELOPMENT	SERVICE SKILLS	ADVANCED EDUCATION (MIN. EDU 10)
1	INT +1	Drive or Flyer	Art
2	EDU +1	Electronics	Advocate
3	SOC +1	Diplomat	Electronics
4	DEX +1	Medic	Language
5	END +1	Investigate	Engineer
6	Language	Science	Science

1D	FIELD RESEARCHER	SCIENTIST	PHYSICIAN
1	Electronics	Admin	Medic
2	Vacc Suit	Engineer	Electronics
3	Navigation	Science	Investigate
4	Survival	Science	Medic
5	Investigate	Electronics	Persuade
6	Science	Science	Science

RANKS AND BONUSES

RANK	FIELD RESEARCHER	SKILL OR BONUS
0	—	—
1	—	Science 1
2	—	Electronics (computers) 1
3	—	Investigate 1
4	—	—
5	—	Science 2
6	—	—

RANKS AND BONUSES

RANK	SCIENTIST	SKILL OR BONUS
0	—	—
1	—	Science 1
2	—	Electronics (computers) 1
3	—	Investigate 1
4	—	—
5	—	Science 2
6	—	—

RANK	PHYSICIAN	SKILL OR BONUS
0	—	—
1	—	Medic 1
2	—	—
3	—	Science 1
4	—	—
5	—	Science 2
6	—	—

MISHAPS

1D	MISHAP
1	Severely injured (this is the same as a result of 2 on the Injury table). Alternatively, roll twice on the Injury table and take the lower result.
2	A disaster leaves several injured and others blame you, forcing you to leave your career. Roll on the Injury table twice, taking the higher result and gain a Rival.
3	The planetary government interferes with your research for political or religious reasons. If you continue with your work openly, increase Science by one level and gain an Enemy. If you continue with your work secretly, increase Science by one level and reduce your SOC by 2. This mishap does not cause you to leave this career.
4	An expedition or voyage goes wrong, leaving you stranded in the wilderness. Gain Survival 1 or Athletics (dexterity or endurance) 1. By the time you find your way home, your job is gone.
5	Your work is sabotaged by unknown parties. You may salvage what you can and give up (leave the career but retain this term's Benefit roll) or start again from scratch (lose all Benefit rolls from this career but you do not have to leave).
6	A rival researcher blackens your name or steals your research. Gain a Rival but you do not have to leave this career.

EVENTS

2D	EVENT
2	Disaster! Roll on the Mishap table but you are not ejected from this career.
3	You are called upon to perform research that goes against your conscience. Accept and you gain an extra Benefit roll, a level in each of any two Science skill specialties and D3 Enemies.
4	You are assigned to work on a secret project for a patron or organisation. Gain one of Medic 1, Science 1, Engineer 1, Electronics 1 or Investigate 1.
5	You win a prestigious prize for your work, garnering both the praise and envy of your peers. Gain DM+1 to any one Benefit roll.
6	You are given advanced training in a specialist field. Roll EDU 8+ to gain any one skill of your choice at level 1.
7	Life Event. Roll on the Life Events table (see page 46).
8	You have the opportunity to cheat in some fashion, advancing your career and research by stealing another's work, using an alien device, taking a shortcut and so forth. If you refuse, you gain nothing. If you accept, roll Deception 8+ or Admin 8+. If you succeed, you gain DM+2 to any one Benefit roll and may increase any skill by one level but also gain an Enemy. If you fail, gain an Enemy and lose one Benefit roll from this career.
9	You make a breakthrough in your field. Gain DM+2 to your next advancement roll.
10	You become entangled in a bureaucratic or legal morass that distracts you from your work. Gain one of Admin 1, Advocate 1, Persuade 1 or Diplomat 1.
11	You work for an eccentric but brilliant mentor, who becomes an Ally. Either increase Science by one level or DM+4 to your next advancement roll thanks to their aid.
12	Your work leads to a considerable breakthrough. You are automatically promoted.

SCOUT

Members of the exploratory service. Scouts explore new areas, map and survey known or newly discovered areas and maintain communication ships which carry information and messages between the worlds of the galaxy.

ASSIGNMENTS

Choose one of the following:

Courier: You are responsible for shuttling messages and high value packages around the galaxy.
Surveyor: You visit border worlds and assess their worth.
Explorer: You go wherever the map is blank, exploring unknown worlds and uncharted space.

CAREER PROGRESS

	SURVIVAL	ADVANCEMENT
Courier	END 5+	EDU 9+
Surveyor	END 6+	INT 8+
Explorer	END 7+	EDU 7+

MUSTERING OUT BENEFITS

1D	CASH	BENEFITS
1	Cr20000	Ship Share
2	Cr20000	INT +1
3	Cr30000	EDU +1
4	Cr30000	Weapon
5	Cr50000	Weapon
6	Cr50000	Scout Ship
7	Cr50000	Scout Ship

SKILLS AND TRAINING

1D	PERSONAL DEVELOPMENT	SERVICE SKILLS	ADVANCED EDUCATION (MIN. EDU 8)
1	STR +1	Pilot (small craft or spacecraft)	Medic
2	DEX +1	Survival	Language
3	END +1	Mechanic	Seafarer
4	INT +1	Astrogation	Explosives
5	EDU +1	Vacc Suit	Science
6	Jack-of-all-Trades	Gun Combat	Jack-of-all-Trades

1D	COURIER	SURVEYOR	EXPLORER
1	Electronics	Electronics	Electronics
2	Flyer	Persuade	Pilot
3	Pilot (spacecraft)	Pilot	Engineer
4	Engineer	Navigation	Science
5	Athletics	Diplomat	Stealth
6	Astrogation	Streetwise	Recon

RANKS AND BONUSES

RANK	TITLE	SKILL OR BONUS
Rank	Title	Skill or Bonus
0	—	—
1	Scout	Vacc Suit 1
2	—	—
3	Senior Scout	Pilot 1
4	—	—
5	—	—
6	—	—

MISHAPS

1D	MISHAP
1	Severely injured (this is the same as a result of 2 on the Injury table). Alternatively, roll twice on the Injury table and take the lower result.
2	Psychologically damaged by your time in the scouts. Reduce your INT or SOC by 1.
3	Your ship is damaged and you have to hitch-hike your way back across the stars to the nearest scout base. Gain 1D Contacts and D3 Enemies.
4	You inadvertently cause a conflict between the Imperium and a minor world or species. Gain a Rival and Diplomat 1.
5	You have no idea what happened to you – they found your ship drifting on the fringes of friendly space.
6	Injured. Roll on the Injury table (see page 49).

EVENTS

2D	EVENT
2	Disaster! Roll on the Mishap table but you are not ejected from this career.
3	Your ship is ambushed by enemy vessels. Either run and roll Pilot 8+ to escape, or treat with them and roll Persuade 10+ to bargain with them. If you fail the check, then your ship is destroyed and you may not re-enlist in the Scouts at the end of this term. If you succeed, you survive and gain Electronics (sensors) 1. Either way, gain an Enemy.
4	You survey an alien world. Gain one of Animals (riding or training) 1, Survival 1, Recon 1 or Science 1.
5	You perform an exemplary service for the scouts. Gain DM+1 to any one Benefit roll.
6	You spend several years jumping from world to world in your scout ship. Gain one of Astrogation 1, Electronics 1, Navigation 1, Pilot (small craft) 1 or Mechanic 1.
7	Life Event. Roll on the Life Events table (see page 46).
8	When dealing with an alien species , you have an opportunity to gather extra intelligence about them. Roll either Electronics 8+ or Deception 8+. If you succeed, gain an Ally in the Imperium and DM+2 to your next advancement roll. If you fail, roll on the Mishap table but you are not ejected from this career.
9	Your scout ship is one of the first on the scene to rescue the survivors of a disaster. Roll either Medic 8+ or Engineer 8+. If you succeed, gain a Contact and DM+2 to your next advancement roll. If you fail, gain an Enemy.
10	You spend a great deal of time on the fringes of Charted Space. Roll Survival 8+ or Pilot 8+. If you succeed, gain a Contact in an alien species and one level in any skill of your choice. If you fail, roll on the Mishap table but you are not ejected from this career.
11	You serve as the courier for an important message from the Imperium. Either gain one level of Diplomat or DM+4 to your next advancement roll.
12	You discover a world, item or information of worth to the Imperium. You are automatically promoted.

Life Events

2D	Event
2	**Sickness or Injury:** You are injured or become sick. Roll on the Injury table (see page 49).
3	**Birth or Death:** Someone close to you dies, like a friend or family member. Alternatively, someone close to you gives birth (or is born!). You are involved in some fashion (father or mother, relative, godparent and so forth).
4	**Ending of Relationship:** A romantic relationship involving you ends. Badly. Gain a Rival or Enemy.
5	**Improved Relationship:** A romantic relationship involving you deepens, possibly leading to marriage or some other emotional commitment. Gain an Ally.
6	**New Relationship:** You become involved in a romantic relationship. Gain an Ally.
7	**New Contact:** You gain a new Contact.
8	**Betrayal:** You are betrayed in some fashion by a friend. If you have any Contacts or Allies, convert one into a Rival or Enemy. Otherwise, gain a Rival or an Enemy.
9	**Travel:** You move to another world. You gain DM+2 to your next qualification roll.
10	**Good Fortune:** Something good happens to you; you come into money unexpectedly, have a lifelong dream come true, get a book published or have some other stroke of good fortune. Gain DM+2 to any one Benefit roll.
11	**Crime:** You commit or are the victim (or are accused) of a crime. Lose one Benefit roll or take the Prisoner career in your next term.
12	**Unusual Event:** Something weird happens. Roll 1D: 1 – **Useful Ally:** You make a helpful friend. Obtain an Ally. This Ally should make an appearance when the Traveller is in need of help. They just have a knack for being there at the right time!' 2 – **Aliens**: You spend time among an alien species. Gain Science 1 and a Contact among an alien species. 3 – **Alien Artefact**: You have a strange and unusual device from an alien culture that is not normally available to humans. 4 – **Amnesia**: Something happened to you but you do not know what it was. 5 – **Contact with Government**: You briefly came into contact with the highest echelons of the Imperium – an Archduke or the Emperor, perhaps, or Imperial intelligence. 6 – **Ancient Technology**: You have something older than the Imperium or even something older than humanity.

LIFE EVENTS

Even in the distant future, humans are still people. They work, they quarrel, they get sick, they fall in love, they complain about their in-laws... in short, life goes on. If you roll a Life Event during your career, roll on the Life Events table.

BENEFITS

In the course of a Traveller's career, they might save some money, acquire equipment or obtain other benefits from a previous employer. These are determined by Benefit rolls that are made when a Traveller leaves a career. A Traveller gets one Benefit roll for every full term served in that career and one roll for each two levels of rank.

CASH BENEFITS

A Traveller with the Gambler skill gains DM+1 to all rolls on Cash columns. If the Traveller has any money, they may purchase personal equipment worth up to Cr10000 before they start adventuring. More expensive items can be bought during play but Travellers must seek them out. Any leftover money can be converted into cash, trade goods or just saved. Cash Benefits may be taken a maximum of three times.

OTHER BENEFITS

When you leave a career in good standing with your previous employers, you are permitted to keep various pieces of equipment or even shares of a vessel. Different careers grant different Benefits.

Characteristic Increases: Increase the listed characteristic by the amount shown, up to a maximum of 15. Characteristic increases above 15 are lost.

Scientific Equipment: Gain any one piece of scientific equipment with a limit of Cr2000 and TL12. If you roll this Benefit again, take another piece of scientific equipment or gain one level in Electronics or Science.

Scout Ship: You receive a scout ship. You have full use of the ship and can modify it as you see fit but it still belongs to the Scout Service and can (and will!) be recalled back into service as needed. This means you will be expected to complete missions for the Scout Service from time-to-time. If you roll this Benefit more than once, re-roll the result.

Ship Shares: Ship Shares can be put towards obtaining a ship. Each share is worth MCr1 but cannot be redeemed for cash. Travellers can pool their Ship Shares towards the acquisition of a vessel.

Weapon: Select any weapon with a limit of Cr3000 and TL12. If you roll this benefit again, you may take another weapon or one level in the appropriate Melee or Gun Combat skill for a weapon already received as a Benefit.

OBTAINING A SHIP WITH BENEFITS

For simplicity and balance, only one Traveller may start with a ship before the adventure or campaign begins. If two or more Travellers have gained ships, you should debate who actually gets a ship or perhaps determine that each of them has a share in the ship.

ALLIES, CONTACTS, RIVALS AND ENEMIES

An **Ally** is willing to go out of their way to help the Travellers, risking their reputation, status and even their life, but will expect equal consideration from the Travellers. Allies actively work to further the careers of the Travellers, passing on useful information and rumours. In general, Travellers can call on an Ally's aid once per year without penalty but expecting more stresses the Ally's resources.

Contacts help the Travellers when they can but only in a limited fashion. An Ally would give the Travellers a weapon but a Contact would only tell the Travellers where they could purchase it.

Rivals and Enemies are both adversaries of the Travellers – Enemies are just willing to go further. While adventures can revolve around the efforts of a Rival to discredit or kill the Travellers, the Referee should also drop Rivals and Enemies into other plots. For example, if the Travellers are trying to find a starport willing to repair their damaged ship, a Rival might show up in the system and consume the vital replacement parts. Enemies, and especially Rivals, should be mobile. If the Travellers are going to spend their time jumping from system-to-system, then their Rivals should have starships of their own so the Travellers encounter them again and again. Enemies can be stationary but should have a long enough reach to affect the Travellers. Totalitarian governments, evil conspiracies or interstellar corporations all make great Enemies.

AGEING

The effects of ageing begin when a Traveller reaches 34 years of age (at the end of their fourth career term). At the end of the fourth term, and at the end of every term thereafter, the Traveller must roll 2D on the Ageing table. Use the Traveller's total number of terms as a negative DM on this table. The Traveller may choose which characteristics are affected by ageing.

Ageing Crisis: If any characteristic is reduced to 0, then the Traveller suffers an ageing crisis. The Traveller dies unless they pay 1D x Cr10000 for medical care, which brings any characteristics back up to 1. The Traveller must now leave their career and roll for their Benefits.

Ageing

2D	Effects of Ageing
-6	Reduce three physical characteristics by 2, reduce one mental characteristic by 1
-5	Reduce three physical characteristics by 2
-4	Reduce two physical characteristics by 2, reduce one physical characteristic by 1
-3	Reduce one physical characteristic by 2, reduce two physical characteristics by 1
-2	Reduce three physical characteristics by 1
-1	Reduce two physical characteristics by 1
0	Reduce one physical characteristic by 1
1+	No effect

INJURIES

Travellers wounded in combat or accidents during creation must roll on the Injury table to see how bad their injuries are.

Injury

1D	Injury
1	Nearly killed – reduce one physical characteristic by 1D, reduce two other physical characteristics by 2.
2	Severely injured – reduce one physical characteristic by 1D.
3	Missing Eye or Limb – reduce STR or DEX by 2.
4	Scarred – you are scarred and injured. Reduce any physical characteristic by 2.
5	Injured. Reduce any physical characteristic by 1.
6	Lightly Injured. No permanent effect.

Medical Care: If you have been injured, then medical care may be able to undo the effects of the damage. Some worlds have the technology to clone or rebuild damaged organs; others specialise in transplants or cybernetic replacements. Medical care is expensive. The restoration of a lost characteristic costs Cr5000 per point. If you were injured in the service of an organisation, then a portion of your medical care may be paid for. Roll 2D on the Medical Bills table, adding your rank as a DM.

Medical Bills

Career	Roll of 4+	Roll of 8+	Roll of 12+
Scholar	50%	75%	100%
Scout	0%	50%	75%

MEDICAL DEBT

After you have finished creating your Traveller, but before the campaign begins, you must pay any outstanding costs from medical care or anagathic drugs out of your Benefits. Any debt left is hanging over you at the start of the game and you can be sure it will be collected, likely with interest.

For example, Morn suffers an injury during his career as a scout, reducing his STR by 2. He has the injury treated at a starport hospital, at a cost of Cr10000. He has to pay this entire amount himself – but has no money. Morn starts the game with a Cr10000 debt to the hospital.

SKILLS PACKAGES

In addition to the skills acquired during Traveller Creation, each Traveller takes turns selecting skills from the following Explorers' skill package. Keep going until all skills have been selected. Note that each skill is obtained at level 1, so if your Traveller already has the skill at level 1, they obtain no additional benefit from selecting the skill.

Astrogation 1,
Electronics 1,
Gun Combat 1,
Medic 1,
Pilot 1,
Recon 1,
Stealth 1,
Survival 1

SKILLS AND TASKS

Every Traveller acquires a variety of skills during creation that indicate the tasks they perform well:

- If a Traveller has no level in a skill, then they are untrained and suffer DM-3 when trying to use that skill.
- If a Traveller has zero level in a skill (Skill 0), then they are competent in that skill but have probably had little experience in actually using it. They do not get a bonus from having a skill level but they do avoid the penalty for being untrained.
- If a Traveller has one or more levels in a skill (Skill 1, Skill 2 and so on) then they are trained in that skill. Each level grants DM+1 per level to all skill checks using that skill. A Traveller with level 2–3 in a skill is a skilled professional in that field. A Traveller with level 4 or 5 is an expert in their field.

SPECIALTIES

Some skills have specialities that are more focused forms of that skill. A Traveller picks a speciality when they gain level 1 in a skill that has two or more specialities.

For example, a Traveller has Engineer 0, allowing them to make Engineer skill checks without the unskilled penalty. They then gain a level in Engineer and must choose a speciality: j-drive, m-drive, power plant or life support. If they choose j-drive, they record this on their character sheet as Engineer (j-drive) 1. They then make all Engineer checks involving jump drives at DM+1 but still make all other Engineer checks at DM+0. A Traveller can have multiple specialities in a skill – they might have Engineer (j-drive) 1 and Engineer (power plant) 2.

TASK CHECKS

Most actions undertaken by Travellers do not require a skill check. A Traveller does not have to make an Athletics check to run through a forest or Electronics (computers) to access information from their ship's library software. Some actions require a Traveller to have a particular skill but still do not require a check. For example, a Traveller with Flyer 0 can fly an air/raft under normal conditions without making a check.

The Referee should only call for checks when:

- The Travellers are in danger.
- The task is especially difficult or hazardous.
- The Travellers are under the pressure of time.
- Success or failure is especially important
- or interesting.

MAKING CHECKS

To make a check, the Traveller rolls 2D and includes any appropriate Dice Modifiers (DMs). If the total is 8 or more, the Traveller succeeds. The most common forms of task checks are characteristic checks and skill checks.

CHARACTERISTIC CHECKS

The Traveller adds their characteristic DM. For example:

- When forcing open a sealed door on a derelict ship, a Traveller uses their STR DM.
- When balancing on a narrow beam, a Traveller uses their DEX DM.
- When trying to endure a long trek through the desert, a Traveller uses their END DM.
- When trying to decipher an alien puzzle-box, a Traveller uses their INT DM.
- When attempting to remember trivia or a piece of common knowledge, a Traveller uses their EDU DM.
- When trying to impress a guard with his wealth or position, a Traveller uses their SOC DM.

SKILL CHECKS

For a skill check, the Traveller adds both their skill level and, if appropriate, a characteristic DM. The combination of skill and characteristic varies depending on the situation, as chosen by the Referee:

- Shooting a gun uses the appropriate Gun Combat skill and the Traveller's DEX DM.
- Repairing a damaged gun might use Gun Combat and EDU.
- Trying to work out what sort of gun caused a particular wound might use Gun Combat and INT (or perhaps Investigate and INT).

- Hiding from an enemy soldier would call for Stealth and DEX, while staying still for a long time to avoid detection would be a Stealth plus END check.
- Just generally carousing at a party might use Carouse on its own, without any particular characteristic. If the Traveller wants to beat someone in a drinking contest, then they might use Carouse and END; spotting who is out of place at a party would be Carouse and INT, and snubbing someone might use Carouse and SOC.

To summarise: To make a normal (Average) skill check, a Traveller rolls 2D + Skill Level + Characteristic DM + any other relevant DMs and must get a total of 8 or more to succeed.

For example, Kathya (DEX 10, Stealth 0), Erik (DEX 6, Stealth 2) and Morn (DEX 12, no Stealth) are all trying to sneak down a corridor. Kathya has DEX DM+1 and while she gets no DM from only having Stealth 0, she at least avoids the unskilled penalty. Her final modifier is DM+1; she rolls 2D+1 and tries to get 8 or more. Erik has DEX DM+0 but has Stealth 2. His final modifier is DM+2; he rolls 2D+2 and tries to get 8 or more. Morn is more dexterous than either of his companions, with his DEX DM+2. However, he has no Stealth skill at all and so suffers DM-3 for being unskilled. His final modifier is DM-1, so he rolls 2D-1 and tries to get 8 or more.

TASK DIFFICULTIES

Some tasks are easier or harder to complete than others. When the Referee decides a task should be either easier or harder, they may change the target number needed for the check.

WHICH CHARACTERISTIC?

The characteristic that applies to a skill check will be obvious in most cases – balancing atop a wall is blatantly a DEX-based check, while using brute force to disable a mechanism requires STR. The main area of overlap is between INT and EDU. The former covers inspiration, improvisation and pure reasoning, while the latter is for trained responses and known solutions.

Simple tasks are trivial, such as requesting weather data from a tourist computer system or sneaking up on a drugged guard. Simple tasks require a 2 or more to be rolled for the check if they are rolled for at all.

Easy tasks are trivial for a trained professional and simple for an amateur. An Easy task might be holding a ship in perfectly level flight or activating an unfamiliar device that has a clear and simple interface. Easy tasks require a 4 or more to be rolled for the check.

Routine tasks are trivial for a trained professional and relatively easy for an amateur. A Routine task might be hitting a prone victim in melee or landing a ship in optimum conditions with computer assistance. Routine tasks require a 6 or more to be rolled for the check.

Average tasks are a moderate obstacle to a trained professional. Shooting a gun accurately at range, plotting jump calculations for a starship or finding a buyer for a cargo bay full of machine parts are all examples of Average tasks, which require the standard 8 or more to be rolled for the check.

Difficult tasks are tough even for a trained professional. Examples are making an accurate shot in the middle of a ferocious storm, defending a client in court when they are clearly guilty or hacking into a secure computer network. Difficult tasks require a 10 or more to be rolled for the check.

Very Difficult tasks are hard for a trained professional and nearly impossible for an amateur. They require a 12 or more to be rolled for the check.

Formidable tasks are exceptionally hard, such as performing surgery on an alien of radically different biology or hacking a military-grade computer network. Formidable tasks require a 14 or more to be rolled for the check.

Impossible tasks require near-miracles to pull off, such as reconstructing alien DNA or flying a starship through an area of space filled with treacherous stellar phenomena in record-beating time. Impossible tasks require a 16 or more to be rolled for the check.

These difficulties are summarised on the Task Difficulty table.

Task Difficulty

Difficulty	Target Number
Simple	2+
Easy	4+
Routine	6+
Average	8+
Difficult	10+
Very Difficult	12+
Formidable	14+
Impossible	16+

EFFECT

For most situations, the only thing that needs to be determined is whether or not the Traveller succeeds. However, it is sometimes important to know how well the Traveller did – or how badly. To do this, subtract the target number from the dice roll of the check, including any modifiers. This margin of success (or failure) is the Effect that can be consulted on the Effect Results table. This is also used in combat to calculate damage (see page 26). For example, if a Traveller rolls a 4 and a 3 for an Average (8+) check, then applies DM+3 for a total of 10, their Effect is (10 – 8) 2.

Effect Results

Effect	Success or Failure
-6 or less	Exceptional Failure: The Traveller failed as completely as it is possible to fail. If attempting to repair a device, the device is further damaged or even destroyed. In a social situation, the Traveller gets into further trouble.
-2 to -5	Average Failure: The Traveller has failed the task.
-1	Marginal Failure: The Traveller almost succeeded so the Referee may permit them to scrape a success if they take a significant consequence. A Traveller trying to jump across a chasm hangs onto the far side by their fingernails but can only pull themselves up if they drop their backpack. A Traveller trying to land a ship can bring it down safely but the ship incurs significant damage.
0	Marginal Success: The Traveller barely succeeds at the task and may have to accept a condition on their success. They fix the engine but it will overheat. They find a buyer for the goods but the buyer is an untrustworthy criminal.
1 to 5	Average Success: The Traveller succeeds normally.
6 or more	Exceptional Success: The Traveller succeeds in impressive and elegant fashion.

OPPOSED CHECKS

If two or more Travellers oppose one another directly, or if a Traveller directly opposes another character, an opposed check is made. Both Travellers or characters make their task checks as normal, with the winner being the one with the highest Effect. In the case of a draw, the two opponents are locked into standstill with neither gaining an advantage – they may try again or events may overtake them rendering the opposed check meaningless.

MULTIPLE TASKS

A Traveller can try to do two or more things at once, like firing a spacecraft's weapons while also flying, or disarming a bomb while hiding from guards. For every extra thing the Traveller is doing, the level of difficulty for each task is made one level harder. So, an Easy task becomes Routine, while a Very Difficult task becomes Formidable.

Timeframes

Timeframe	Increment	Example Action
1D Seconds	One second	Shooting, punching, jumping
1D Combat Rounds	Combat round (six seconds)	Hurrying a maths problem
1D x 10 Seconds	Ten seconds	Rerouting power, opening a comms channel
1D Minutes	One minute	Applying first aid, basic technical tasks
1D x 10 Minutes	Ten minutes	More complex technical tasks, searching an area thoroughly
1D Hours	One hour	Building a shelter, moving through the wilderness
1D x 4 Hours	Four hours	Researching a problem
1D x 10 Hours	Ten hours	Repairing a damaged ship
1D Days	One day	Combing a city for a missing person

TIMEFRAMES

Each task has a random timeframe of one to six time units. The unit depends on the task – shooting someone or throwing a punch takes 1D seconds, while prepping an air/raft for flight might take 1D minutes, looking for rumours on the street might take 1D hours and repairing a damaged component on a ship might take 1D x 10 hours.

Some sample timeframes are listed in the Timeframes table. The Referee can use these examples for their own checks and actions.

GOING FASTER OR SLOWER

Before you roll, you can choose to move up or down one level on the Timeframes table. Moving up (reducing the time increment) inflicts DM-2 on your check; moving down and increasing the time taken gives you DM+2 on your check. You can only move one time increment.

TASK CHAINS

Travellers often find themselves performing a series of interlinked tasks or working as a group. For example, finding a buyer for a cargo of illegal goods calls for a Streetwise check to find a fence, then a Broker check to negotiate a price. The result of the Streetwise check could conceivably influence the quality and competence of the fence, which affects the Broker check.

Alternatively, when coming up with a plan to attack a fortress, the Travellers begin with a Recon check to scope the place out, then a Tactics check to find weak spots in its defences, then Stealth and Electronics checks to get past the security system. The quality of information gleaned from the Recon check has an impact on the tactics the Travellers choose to adopt and this in turn makes their Stealth checks easier or harder, and so on.

When tasks are linked together like this they are called task chains and the result of one check can give a DM to the next – for better or worse. The DM gleaned from one check and then applied to the next is shown on the Task Chain table.

Each Skill is described using the following format:
Description: What the skill does.
Specialities: The specialities associated with the skill, if any. Most skills have no specialities.
Common Checks: Uses for the skill, listed with time increment, characteristic DM and difficulty.

Task Chain

Previous Check	DM to Current Check	Previous Check	DM to Current Check
Failed With Effect -6 or less	-3	Succeeded With Effect 0	+1
Failed With Effect -2 to -5	-2	Succeeded With Effect 1 to 5	+2
Failed With Effect -1	-1	Succeeded With Effect 6 or more	+3

Admin
This skill covers bureaucracies and administration of all sorts, including the navigation of bureaucratic obstacles or disasters. It also covers tracking inventories, ship manifests and other records.

Avoiding Close Examination of Papers: Average (8+) Admin check (1D x 10 seconds, EDU or SOC).

Advocate
Advocate gives a knowledge of common legal codes and practises, and experience in oratory, debate and public speaking, making it an excellent skill for lawyers and politicians.

Arguing in Court: Opposed Advocate check (1D days, EDU or SOC).

Animals
This skill, rare on industrialised or technologically advanced worlds, is for the care of animals.

Specialities
- **Handling**: The Traveller knows how to handle an animal and ride those trained to bear a rider. Unusual animals raise the difficulty of the check.
  Riding a Horse into Battle: Difficult (10+) Animals (handling) check (1D seconds, DEX). If successful, the Traveller can control the horse for a number of minutes equal to the Effect before needing to make another check.
- **Veterinary**: The Traveller is trained in veterinary medicine and animal care.
  Applying Medical Care: See the Medic skill on page 21 but use the Animals (veterinary).
- **Training**: The Traveller knows how to tame and train animals.
  Taming a Strange Alien Creature: Formidable (14+) Animals (training) check (1D days, INT).

Art
The Traveller is trained in a type of creative art.

Specialities
- **Performer**: The Traveller is a trained actor, dancer or singer at home on stage, screen or holo.
  Performing a Play: Average (8+) Art (performer) check (1D hours, EDU).
  Pretending to be Someone Else: Art (performer) check (INT) opposed by Recon check (INT).
- **Holography**: Recording and producing aesthetically pleasing and clear holographic images.
  Surreptitiously Switching on Your Recorder While in a Secret Meeting: Formidable (14+) Art (holography) check (1D seconds, DEX).
- **Instrument**: Playing a particular musical instrument, such as a flute, piano or organ.
  Playing a Concerto: Difficult (10+) Art (instrument) check (1D x 10 minutes, EDU).
- **Visual Media**: Making artistic or abstract paintings or sculptures in a variety of media.
  Making a Statue of Someone: Difficult (10+) Art (visual media) check (1D days, INT).
- **Write**: Composing inspiring or interesting pieces of text.
  Rousing the People of a Planet by Exposing Their Government's Corruption: Difficult (10+) Art (write) check (1D hours, INT or EDU).

Astrogation
This skill is for plotting the courses of starships and calculating accurate jumps. See the *Spacecraft Operations* chapter.

Plotting Course to a Target World Using a Gas Giant for a Gravity Slingshot: Difficult (10+) Astrogation check (1D x 10 minutes, EDU).
Plotting a Standard Jump: Easy (4+) Astrogation check (1D x 10 minutes, EDU), with DM- equal to the Jump distance.

Athletics
The Traveller is a trained athlete. The Athletics skill effectively augments a Traveller's physical characteristics; whatever you can do with Strength alone you can also add your Athletics (strength) DM to, for example. Athletics is also the principal skill used in adverse gravitational environments, specifically Athletics (dexterity) in low or zero-G and Athletics (strength) in high-G locations.

Specialities
- **Dexterity**: Climbing, Juggling, Throwing. For alien races with wings, this also includes flying.
  Climbing: Difficulty varies. Athletics (dexterity) check (1D x 10 seconds, DEX).
  Sprinting: Average (8+) Athletics (dexterity) check (1D seconds, DEX). If the Traveller does nothing but sprint flat out they can cover 24 + Effect metres with every check. Avoiding obstacles while sprinting requires another Athletics (dexterity) check (Difficult, because they are performing a multiple action).

High Jumping: Average (8+) Athletics (dexterity) check (1D seconds, DEX). The Traveller jumps a number of metres straight up equal to the Effect halved.
Long Jumping: Average (8+) Athletics (dexterity) check (1D seconds, DEX). The Traveller jumps a number of metres forward equal to the Effect with a running start.
Righting Yourself When Artificial Gravity Suddenly Fails on Board a Ship: Average (8+) Athletics (dexterity) check (1D seconds, DEX).

- **Endurance**: Long-distance running, hiking
  Long-distance Running: Average (8+) Athletics (endurance) check (1D x 10 minutes, END).
  Long-distance Swimming: Average (8+) Athletics (endurance) check (1D x 10 minutes, END).
- **Strength**: Feats of strength, weight-lifting.
  Arm Wrestling: Opposed Athletics (strength) check (1D minutes, STR).
  Feats of Strength: Average (8+) Athletics (strength) check (1D x 10 seconds, STR).
  Performing a Complicated Task in a High Gravity Environment: Difficult (10+) Athletics (strength) check (1D seconds, STR).

Broker

The Broker skill allows a Traveller to negotiate trades and arrange fair deals. It is heavily used when trading.

Negotiating a Deal: Average (8+) Broker check (1D hours, INT).
Finding a Buyer: Average (8+) Broker check (1D hours, SOC).

Carouse

Carousing is the art of socialising; having fun, but also ensuring other people have fun, and infectious good humour. It also covers social awareness and subterfuge in such situations.

Drinking Someone Under the Table: Opposed Carouse check (1D hours, END). Difficulty varies by liquor.
Gathering Rumours at a Party: Average (8+) Carouse check (1D hours, SOC).

Deception

Deception allows a Traveller to lie fluently, disguise themselves, perform sleight of hand and fool onlookers. Most underhanded ways of cheating and lying fall under deception.

Convincing a Guard to let you Past Without ID: Very Difficult (12+) Deception check (1D minutes, INT). Alternatively, oppose with a Recon check.
Disguising Yourself as a Wealthy Noble to Fool a Client: Difficult (10+) Deception check (1D x 10 minutes, INT or SOC). Alternatively, oppose with a Recon check.

Diplomat

The Diplomat skill is for negotiating deals, establishing peaceful contact and smoothing over social faux pas. It includes how to behave in high society and proper ways to address nobles. It is a much more formal skill than Persuade.

Greeting the Emperor Properly: Difficult (10+) Diplomat check (1D minutes, SOC).
Negotiating a Peace Treaty: Average (8+) Diplomat check (1D days, EDU).

Drive

This skill is for controlling ground vehicles of various types. There are several specialities.

Specialities

- **Hovercraft**: Vehicles that rely on a cushion of air and thrusters for motion.
  Manoeuvring Through a Tight Canal: Difficult (10+) Drive (hovercraft) check (1D minutes, DEX).
- **Mole**: For controlling vehicles that move through solid matter using drills or other earth-moving technologies, such as plasma torches or cavitation.
  Surfacing in the Right Place: Average (8+) Drive (mole) check (1D x 10 minutes, INT).
  Expose a Vein of Minerals: Difficult (10+) Drive (mole) check (1D x 10 minutes, DEX).
- **Track**: For tanks and other vehicles that move on tracks.
  Manoeuvring (or Smashing) Through a Forest: Difficult (10+) Drive (tracked) check (1D minutes, DEX).
- **Walker**: Vehicles that use two or more legs to manoeuvre.
  Negotiating Rough Terrain: Difficult (10+) Drive (walker) check (1D minutes, DEX).
- **Wheel**: For automobiles and similar groundcars.
  Driving a Groundcar in a Short Race: Opposed Drive (wheeled) check (1D minutes, DEX). *Avoiding an Obstacle on the Road*: Average (8+) Drive (wheeled) check (1D seconds, DEX).

Electronics

This skill is used to operate electronic devices such as computers and ship-board systems. Higher levels represent the ability to repair and create electronic devices and systems. There are several specialities.

Specialities

- **Comms**: The use of modern telecommunications; opening communications channels, querying computer networks, jamming signals and so on, as well as the proper protocols for communicating with starports and other spacecraft.
  Bouncing a Signal off Orbiting Satellite to Hide Your Transmitter: Difficult (10+) Electronics (comms) check (1D x 10 minutes, INT).
  Jamming a Comms System: Opposed Electronics (comms) check (1D minutes, INT). Difficult (10+) for radio, Very Difficult (12+) for laser and Formidable (14+) for masers. A Traveller using a comms system with a higher Technology Level than their opponent gains DM+1 for every TL of difference.
- **Computers**: Using and controlling computer systems and similar electronics.
  Searching a Corporate Database for Evidence of Illegal Activity: Difficult (10+) Electronics (computers) check (1D hours, INT).
  Hacking into a Secure Computer Network: Formidable (14+) Electronics (computers) check (1D x 10 hours, INT). Hacking is aided by Intrusion programs and made more difficult by Security programs. The Effect determines the amount of data retrieved; failure means the targeted system may be able to trace the hacking attempt.
- **Remote Ops**: Using telepresence to remotely control drones, robots and other devices.
  Using a Mining Drone to Excavate an Asteroid: Routine (6+) Electronics (remote ops) check (1D hours, DEX).
- **Sensors**: The use and interpretation of data from electronic sensor devices, from observation satellites and remote probes to thermal imaging and densitometers.
  Making a Detailed Sensor Scan: Routine (6+) Electronics (sensors) check (1D x 10 minutes, INT or EDU).
  Analysing Sensor Data: Average (8+) Electronics (sensors) check (1D hours, INT).

Engineer

The Engineer skill is used to operate, maintain and repair spacecraft and advanced vehicles. For repairs on simpler machines and systems, use the Mechanic skill.

Specialities

- **M-drive**: Maintaining and operating a spacecraft's manoeuvre drive and artificial gravity.
  Overcharging a Thruster Plate to Increase a Ship's Agility: Difficult (10+) Engineer (m-drive) check (1D minutes, INT).
  Estimating a Ship's Tonnage From its Observed Performance: Average (8+) Engineer (m-drive) check (1D x 10 seconds, INT).
- **J-drive**: Maintaining and operating a spacecraft's jump drive.
  Making a Jump: Easy (4+) Engineer (j-drive) check (1D x 10 min**utes, EDU).**
- **Life Support**: Covers oxygen generators, heating, lighting and other life support systems.
  Safely Reducing Power to Life Support to Prolong a Ship's Battery Life: Average (8+) Engineer (life support) check (1D minutes, EDU).
- **Power**: Maintaining and operating a spacecraft's power plant.
  Monitoring an Enemy ship's Power Output to Determine its Capabilities: Difficult (10+) Engineer (power) check (1D minutes, INT).

Explosives

The Explosives skill covers the use of demolition charges and other explosive devices, including assembling or disarming bombs. A failed Explosives check with an Effect of -4 or less can result in a bomb detonating prematurely.

Planting a Breaching Charge: Average (8+) Explosives check (1D x 10 seconds, EDU). The damage from the explosive is multiplied by the Effect.
Disarming a Complicated Bomb: Formidable (14+) Explosives check (1D minutes, DEX).

Flyer

The various specialities of this skill cover different types of flying vehicles. Flyers only work in an atmosphere; vehicles that can leave the atmosphere and enter orbit generally use the Pilot skill.

Specialities

Airship: Used for airships, dirigibles and other powered lighter than air craft.
Grav: This covers air/rafts, grav belts and other vehicles that use gravitic technology.
Ornithopter: For vehicles that fly through the use of flapping wings.
Rotor: For helicopters, tilt-rotors and aerodynes.

Wing: For jets, vectored thrust aircraft and aeroplanes using a lifting body.

Landing Safely: Routine (6+) Flyer check (1D minutes, DEX).
Racing Another Flyer: Opposed Flyer check (1D x 10 minutes, DEX).

Gambler

The Traveller is familiar with gambling games, such as poker, roulette, blackjack, horse-racing and so on, and has an excellent grasp of statistics and probability. Gambler increases the rewards from Benefit rolls, giving the Traveller DM+1 to their cash rolls if they have Gambler 1 or better.

Play a Casual Game of Poker: Opposed Gambler check (1D hours, INT).
Picking the Right Horse to Bet On: Average (8+) Gambler check (1D minutes, INT).

Gun Combat

The Gun Combat skill covers a variety of ranged weapons. See the *Combat* chapter for details on using guns in combat.

Specialities

- **Archaic**: For primitive weapons that are not thrown, such as bows and blowpipes.
- **Energy**: Using advanced energy weapons like laser pistols or plasma rifles.
- **Slug**: Weapons that fire a solid projectile such as the autorifle or gauss rifle.

Firing a Gun: Average (8+) Gun Combat check (1D seconds, DEX).

Gunner

The various specialities of this skill deal with the operation of ship-mounted weapons in space combat. Most Travellers have smaller ships equipped solely with turret weapons.

Specialities

- **Turret**: Operating turret-mounted weapons on board a ship.
- **Ortillery**: A contraction of Orbital Artillery – using a ship's weapons for planetary bombardment or attacks on stationary targets.
- **Screen**: Using a ship's energy screens like Black Globe generators or meson screens.
- **Capital**: Operating bay or spinal mount weapons on board a ship.

Firing a Weapon: Average (8+) Gunner (turret, ortillery or capital) check (1D seconds, DEX).
Activating a Screen: Difficult (10+) Gunner (screen) check (1D seconds, DEX).

Heavy Weapons

The Heavy Weapons skill covers portable and larger weapons that cause extreme property damage, such as rocket launchers, artillery and large plasma weapons.

Specialities

- **Artillery**: Fixed guns, mortars and other indirect fire weapons.
- **Portable**: Missile launchers, flamethrowers and portable fusion and plasma guns.
- **Vehicle**: Large weapons typically mounted on vehicles or strongpoints such as tank guns and autocannon.

Firing an Artillery Piece at a Visible Target: Average (8+) Heavy Weapons (artillery) check (1D seconds, DEX).
Firing an Artillery Piece Using Indirect Fire: Difficult (10+) Heavy Weapons (artillery) check (1D x 10 seconds, INT).

Investigate

The Investigate skill incorporates keen observation, forensics and detailed analysis.

Searching a Crime Scene for Clues: Average (8+) Investigate check (1D x 10 minutes, INT).
Watching a Bank of Security Monitors in a Starport, Waiting for a Specific Criminal: Difficult (10+) Investigate check (1D hours, INT).

Jack-of-All-Trades

The Jack-of-All-Trades skill works differently to other skills. It reduces the unskilled penalty a Traveller receives for not having the appropriate skill by one for every level of Jack-of-All-Trades. For example, if a Traveller does not have the Pilot skill, they suffer DM-3 to all Pilot checks. However, if that Traveller has Jack-of- All-Trades 2, then the penalty is reduced by 2 to DM-1. With Jack-of-All-Trades 3, a Traveller can totally negate the penalty for being unskilled. There is no benefit for having Jack-of-All-Trades 0 or Jack-of-All-Trades 4 or higher.

Language

There are numerous different Language specialities, each one covering reading and writing in a different language. All Travellers can speak and read their native language without needing the Language skill. Having Language 0 implies the Traveller has a smattering of simple phrases in a few common languages.

Specialities

There are, of course, as many specialities of Language as there are actual languages. Those presented here are examples from the Third Imperium setting:

- **Galanglic**: The common trade language of the Third Imperium, derived originally from the English spoken in the Rule of Man.
- **Vilani**: The language spoken by the Vilani of the First Imperium; the 'Latin' of the Third Imperium.
- **Zdetl**: The Zhodani spoken language.
- **Oynprith**: The Droyne ritual language.
- **Trokh**: The Aslan spoken language.
- **Gvegh**: The Vargr spoken language.

Ordering a Meal, Asking for Basic Directions: Routine (6+) Language check (1D seconds, EDU).
Holding a Simple Conversation: Average (8+) Language check (1D x 10 seconds, EDU).
Understanding a Complex Technical Document or Report: Very Difficult (12+) Language check (1D minutes, EDU).

Leadership

The Leadership skill is for directing, inspiring and rallying allies and comrades. A Traveller may make a Leadership action in combat, as detailed on page 24.

Rallying Shaken Troops: Difficult (10+) Leadership check (1D seconds, SOC).

Mechanic

The Mechanic skill allows a Traveller to maintain and repair most equipment – some advanced equipment and spacecraft components require the Engineer skill. Unlike the narrower and more focused Engineer or Science skills, Mechanic does not allow a Traveller to build new devices or alter existing ones – it is purely for repairs and maintenance but covers all types of equipment.

Repairing a Damaged System in the Field: Average (8+) Mechanic check (1D minutes, INT or EDU).

Medic

The Medic skill covers emergency first aid and battlefield triage as well as diagnosis, treatment, surgery and long-term care. See Injury and Recovery on page 30.

First Aid: Average (8+) Medic check (1D rounds, EDU). The patient regains lost characteristic points equal to the Effect.
Treat Poison or Disease: Average (8+) Medic check (1D hours, EDU).
Long-term Care: Average (8+) Medic check (1 day, EDU).

Melee

The Melee skill covers attacking in hand-to-hand combat and the use of suitable weapons.

Specialities

- **Unarmed**: Punching, kicking and wrestling; using improvised weapons in a bar brawl.
- **Blade**: Attacking with swords, rapiers, blades and other edged weapons.

- **Bludgeon**: Attacking with maces, clubs, staves and so on.
- **Natural**: Weapons that are part of an alien or creature, such as claws or teeth.

Attacking with a Sword: Average (8+) Melee (blade) check (1D seconds, STR or DEX).

Navigation

Navigation is the planetside counterpart of astrogation, covering plotting courses and finding directions on the ground.

Plotting a Course Using an Orbiting Satellite Beacon: Routine (6+) Navigation check (1D x 10 minutes, INT or EDU).
Avoiding Getting Lost in Thick Jungle: Difficult (10+) Navigation check (1D hours, INT).

Persuade

Persuade is a more casual, informal version of Diplomat. It covers fast talking, bargaining, wheedling and bluffing. It also covers bribery or intimidation.

Bluffing Your Way Past a Guard: Opposed Persuade check (1D minutes, INT or SOC).
Haggling in a Bazaar: Opposed Persuade check (1D minutes, INT or SOC).
Intimidating a Thug: Opposed Persuade check (1D minutes, STR or SOC).

Pilot

The Pilot skill specialities cover different forms of spacecraft. See the *Spacecraft Operations* chapter for more details.

Specialities

- **Small Craft**: Shuttles and other craft under 100 tons.
- **Spacecraft**: Trade ships and other vessels between 100 and 5,000 tons.
- **Capital Ships**: Battleships and other ships over 5,000 tons.

Profession

A Traveller with a Profession skill is trained in producing useful goods or services. There are many different Profession specialities but each one works the same way – the Traveller can make a Profession check to earn money on a planet that supports that trade. The amount of money raised is Cr250 x the Effect of the check per month. Unlike other skills with specialties, levels in the Profession skill do not grant the ability to use other specialties at level 0. Each specialty must be learned individually. Someone with a Profession skill of 0 has a general grasp of working for a living but little experience beyond the most menial jobs.

There are a huge range of potential specialities for this skill, one for every possible profession in the universe. Some examples suitable to a science fiction setting are given here.

Specialities

- **Belter**: Mining asteroids for valuable ores and minerals.
- **Biologicals**: Engineering and managing artificial organisms.
- **Civil Engineering**: Designing structures and buildings.
- **Construction**: Building orbital habitats and megastructures.
- **Hydroponics**: Growing crops in hostile environments.
- **Polymers**: Designing and using polymers.

Recon

A Traveller trained in Recon is able to scout out dangers and spot threats, unusual objects or out of place people.

Working Out the Routine of a Patrol: Average (8+) Recon check (1D x 10 minutes, INT).

Science

The Science skill covers not just knowledge but also practical application of that knowledge where such practical application is possible. There are a large range of specialities.

Specialities

- **Archaeology**: The study of ancient civilisations, including the previous Imperiums and Ancients. It also covers techniques of investigation and excavations.
- **Astronomy**: The study of stars and celestial phenomena.
- **Biology**: The study of living organisms.
- Chemistry: The study of matter at the atomic, molecular and macromolecular levels.
- **Cosmology**: The study of the universe and its creation.
- **Cybernetics**: The study of blending living and synthetic life.

- **Economics**: The study of trade and markets.
- **Genetics**: The study of genetic codes and engineering.
- **History**: The study of the past, as seen through documents and records as opposed to physical artefacts.
- **Linguistics**: The study of languages.
- **Philosophy**: The study of beliefs and religions.
- **Physics**: The study of the fundamental forces.
- **Planetology**: The study of planet formation and evolution.
- **Psychology**: The study of thought and society.
- **Robotics**: The study of robot construction and use.
- **Xenology**: The study of alien life forms.

Remembering a Commonly Known Fact: Routine (6+) Science check (1D minutes, EDU).
Researching a Problem Related to a Field of Science: Average (8+) Science check (1D days, INT).

Seafarer

The Seafarer skill covers all manner of watercraft and ocean travel.

Specialities

- **Ocean Ships**: For motorised sea-going vessels.
- **Personal**: Used for very small waterborne craft such as canoes and rowboats.
- **Sail**: This skill is for wind-driven watercraft.
- **Submarine**: For vehicles that travel underwater.

Controlling a Canoe in a Violent Storm: Formidable (14+) Seafarer (personal) check (1D hours, END).

Stealth

A Traveller trained in the Stealth skill is adept at staying unseen, unheard and unnoticed.

Sneaking Past a Guard: Stealth check (1D x 10 seconds, DEX) opposed by Recon (INT) check.

Steward

The Steward skill allows the Traveller to serve and care for nobles and high-class passengers. It covers everything from proper address and behaviour to cooking and tailoring, as well as basic management skills. A Traveller with the Steward skill is necessary on any ship offering high passage.

Cooking a Fine Meal: Average (8+) Steward check (1D hours, EDU).

Streetwise

A Traveller with the Streetwise skill understands the urban environment and the power structures in society. On their homeworld, and in related systems, they know criminal contacts and fixers. On other worlds, they can quickly intuit power structures and fit into local underworlds.

Finding a Dealer in Illegal Technologies: Average (8+) Streetwise check (1D x 10 hours, INT).

Survival

The Survival skill is the wilderness counterpart of the urban Streetwise skill – the Traveller is trained to survive in the wild, build shelters, hunt or trap animals, avoid exposure and so forth. They can recognise plants and animals of their homeworld and related planets and can pick up on common clues and traits even on unfamiliar worlds.

Gathering Supplies to Survive for a Week: Average (8+) Survival check (1D days, EDU).

Tactics

This skill covers tactical planning and decision making, from board games to squad level combat to fleet engagements. For use in combat, see the *Combat* chapter.

Specialities

- **Military**: Co-ordinating the attacks of foot troops or vehicles on the ground.
- **Naval**: Co-ordinating the attacks of a spacecraft or fleet.

Developing a Strategy to Attack a Base: Average (8+) Tactics (military) check (1D x 10 hours, INT).

Vacc Suit

The Vacc Suit skill allows a Traveller to wear and operate spacesuits and environmental suits. A Traveller will rarely need to make Vacc Suit checks under ordinary circumstances – merely possessing the skill is enough. If the Traveller does not have the requisite Vacc Suit skill for the suit they are wearing, they suffer DM-2 to all skill checks made while wearing a suit for each missing level. This skill also permits a Traveller to operate advanced battle armour.

Performing a Systems Check on Battle Dress: Average (8+) Vacc Suit check (1D minutes, EDU).

COMBAT

Firing a gun, swinging a sword or ordering troops into battle are all skill checks that are made during combat actions. However, a combat action need not be an attack – jamming communications, giving orders and applying first aid are also combat actions.

INITIATIVE

At the start of combat, every Traveller makes a DEX or INT check. The Effect of this check is their Initiative for the duration of the combat and reflects when they get to act in a combat round. Those with higher Initiatives take their actions before those with lower scores. Travellers may optionally delay their actions until later in the turn. The Initiative check simply indicates the first opportunity to act.

OPPOSING FORCES

The Referee may make just one DEX or INT check for all of the characters under their control, using their highest DEX or INT score. This speeds up the game a great deal.

AMBUSHES AND SURPRISE

If one side is unaware of the other, an ambush may take place. The side that is aware gains DM+6 to its Initiative check for the first round only. The side that is unaware suffers DM-6 for the first round only.

TACTICS

If not surprised, one Traveller (or character under Referee control) may make a Tactics check at the start of combat. The Effect of this check is applied to the Initiative of everyone on that side.

THE COMBAT ROUND

Each combat round lasts six seconds, during which each Traveller or opposing character may perform a Minor Action and a Significant Action. Alternatively, they may perform three Minor Actions and no Significant Actions. Actions are taken in Initiative order, starting with the highest. If two or more Travellers have the same Initiative score, the one with the highest DEX goes first. If still tied, they act simultaneously.

When it is a Traveller's turn to act, they take their Actions before play moves to another Traveller or character. Once every Traveller has had a chance to act, the combat round is over and a new one begins. Every Traveller retains the same Initiative score for every combat round.

SIGNIFICANT ACTIONS

A Traveller may perform one Significant Action in every combat round, chosen from those below.

ATTACK

An attack is an attempt to injure an enemy with a melee or ranged weapon, such as a knife or a rifle. The Traveller declares they are going to attack and selects a target. The target may then choose a Reaction. The Traveller then makes an appropriate skill check and if they score 8+, the attack is successful and damage is dealt to the target (see Damage on page 26).

Melee Attack

2D + Melee (appropriate speciality) +STR or DEX DM.

Ranged Attack

2D + Gun Combat (appropriate speciality) + DEX DM.

Some ranged weapons use a skill other than Gun Combat. A rocket launcher, for example, uses Heavy Weapons (portable), while grenades and any other weapons that are thrown use Athletics (dexterity).

Common Modifiers to Ranged Attacks

Dice Modifiers (DM) are commonly used to influence Gun Combat (or Heavy Weapons or Athletics) checks when attacking as shown on the Common Modifiers table.

LEADERSHIP

A Traveller can issue commands to comrades by making a Leadership check (INT, EDU or SOC). The Effect of this check is the number of DM+1 bonuses the Traveller can give to any skill checks of other Travellers on the same side. The Traveller must be able to freely communicate to other Travellers to grant a bonus and no Traveller can benefit from more than one DM+1 bonus for any single check.

Common Modifiers

Bonuses	DM	Penalties	DM
Aiming	+1 per action spent Aiming	Fast Moving Target	-1 for every full 10 metres of target movement relative to the attacker
Laser Sight	+1 if Aiming	Long Range	-2
Short Range	+1	Extreme Range	-4
—	—	Target in Cover	-2
—	—	Prone Target	-1

If the Effect of the Leadership check is negative, the opposing side may inflict a number of penalties equal to the Effect to combatants on the Traveller's side. Each penalty is equal to DM-1 and is applied in the same way as the bonuses for good leadership.

MINOR ACTIONS

A Traveller can normally perform a single Minor Action in a combat round, although they may perform up to three if they forego their Significant Action.

AIMING

A Traveller who spends a Minor Action aiming at a target receives DM+1 to their next ranged attack, so long as they do nothing else but aim. A Traveller may use consecutive Minor Actions to aim, gaining a maximum of DM+6 to an attack provided they are not interrupted.

CHANGING STANCE

A Traveller may stand, crouch or lie prone as a Minor Action.

DRAWING/RELOADING

Most weapons require a Minor Action to draw or make ready for combat and a Minor Action to reload once they have run out of ammunition. If a weapon requires more time for either, this is noted in its description.

MOVEMENT

The Traveller may move a number of metres up to their Movement score (for humans and most humanoid Travellers, this is six metres) for each Minor Action. Difficult terrain halves a Traveller's Movement. Being prone quarters a Traveller's Movement score. Some aliens and animals have different Movement scores and this is noted in their descriptions.

FREE ACTIONS

Free actions can be accomplished so quickly and do not warrant a Minor Action. For example, shouting a warning or pushing a button,. A Traveller may perform as many Free Actions in a combat round as they wish, limited by the Referee.

EXTENDED ACTIONS

Some skill checks take longer than a single combat round to complete, such as downloading data from a computer during a firefight. If a Traveller sustains damage while performing an Extended Action, they must make a check with the skill they are using, with the amount of damage sustained as a negative DM. If they fail the check, this round's work does not count towards the completion of the task. Failure with an Effect of -6 or less ruins the task and the Traveller must start again.

REACTIONS

A Traveller who is about to be attacked can react, dodging a shot or parrying a blow. Travellers can perform an unlimited number of Reactions in every combat round. However, every time a Traveller performs a Reaction, they suffer DM-1 on their next set of actions.

DODGING

Dodging inflicts a penalty equal to a Traveller's DEX DM or Athletics (dexterity), whichever is higher, to their attacker's attack roll. Every attack must be dodged separately, so if a Traveller is shot at by two enemies in the same round, they can dodge both but suffer DM-2 on their next actions.

DIVING FOR COVER

A Traveller may dive for cover from ranged attacks behind an object within 1.5 metres. A diving Traveller inflicts a DM-2 on the attack roll of every attacker who targets them in this combat round and may get a bonus to Protection. If there is no suitable cover, the Traveller only inflicts DM-1 on attack rolls made against them. A diving Traveller forgoes their next actions completely.

PARRYING
A Traveller in close combat may attempt to parry an opponent's melee attack as a Reaction, inflicting their Melee skill as a negative DM to the attacker's attack roll.

MELEE ATTACKS
When a Traveller is within two metres of an enemy, they are locked in close combat. At close range, the following rules apply:

- Melee attacks may be made (see page 24).
- Neither combatant may attack any other target other than those they are in close combat with.
- Only single-handed ranged weapons may be used. Note that pistols can be parried in close combat.
- Larger weapons, such as rifles, may only be used as clubs.
- If one combatant moves while locked in close combat, their enemy may make an immediate (and 'free') attack with DM+2 to the attack roll.

WEAPONS
A variety of weapons are available to Travellers, each of which share some common characteristics:

- **TL**: The Tech Level where the weapon first appears.
- **Range**: The effective range of a weapon, at which its user has a chance of getting a shot on target.
- Short Range: If a target is within one quarter of a weapon's Range score, the attacker gains DM+1 to all attack rolls made with it.
- **Long Range**: If a target is beyond the weapon's Range but less than twice the Range away, it is at Long Range. The attacker suffers DM-2 when making an attack roll.
- **Extreme Range**: If a target is beyond the weapon's Long Range but less than four times the Range away, it is at Extreme Range. The attacker will suffer DM-4 when making an attack roll. Unless a weapon has the Scope trait (see page 27), all attacks made at a range greater than 100 metres are automatically considered to be Extreme Range.
- **Damage**: This is the base amount of damage dealt by the weapon when it successfully hits a target.
- **Kg**: Mass of the weapon. This affects how much a Traveller can carry.
- **Cost**: The cost of buying the weapon, in Credits.
- **Magazine**: How many shots can be fired before reloading is necessary.
- **Magazine Cost**: The cost of a spare magazine that fully reloads the weapon.
- **Traits**: Some weapons have special rules. These are covered in more detail on page 27.

DAMAGE
Damage is listed as a number of dice. A rifle, for example, has a Damage score of 3D:

- Upon a successful attack, damage is rolled for, with the Effect of the roll added to the total.
- Damage is initially applied to a target's END. If END is reduced to 0, excess damage is deducted from either the target's STR or DEX (target's choice).
- If either STR or DEX are reduced to 0, the Traveller becomes unconscious and any further damage is deducted from the remaining physical characteristic.
- If all three physical characteristics (STR, DEX and END) are reduced to 0, the Traveller dies.

When characteristics have been eroded by damage, their DMs should be recalculated and the impaired DM used until the damage is healed. Healing damage is covered on page 30.

MELEE ATTACKS
When a melee attack is successful, the attacker adds their STR DM to the damage rolled for the weapon, in addition to the Effect of the attack roll.

ARMOUR
Armour reduces the damage sustained in an attack by the value of its Protection score. An attack with Effect 6+ always inflicts at least one point of damage.

COVER
A Traveller using cover inflicts DM-2 against all ranged attacks made against them.

HIDING
If a Traveller is able to position themselves completely in cover and makes no attacks, they can hide. If an enemy is aware of the Traveller's presence, they can still be attacked. The Traveller gains the benefits of cover but also gains a bonus to their armour's Protection. The amount of Protection a target receives depends on the type of cover it is hiding behind. If a Traveller is behind two different types of cover (for example, ground car and a tree), they only receive the Protection bonus from the most effective cover.

Cover	Bonus Protection
Vegetation	+2
Tree Trunk	+6
Stone Wall	+8
Civilian Vehicle	+10
Armoured Vehicle	+15
Fortifications	+20

DESTRUCTIVE WEAPONS

Destructive weapons have a Damage score with two Ds – for example, 3DD – indicating three dice for damage, multiplied by 10.

GRAPPLING

In close combat, a Traveller may try to grapple their enemy. The Traveller makes an opposed Melee (unarmed) check with their target, each using either STR or DEX DM. While involved in a grapple, the Traveller may not perform any Significant or Minor Action except to make opposed Melee (unarmed) checks. The winner of this check may choose to do one of the following:

- Force an opponent prone on the ground.
- Disarm an opponent. If the Effect is 6+, they may take their opponent's weapon.
- Throw an opponent 1D metres, causing 1D damage. This automatically ends the grapple.
- Inflict damage equal to 2 + the Effect of the Melee check. This damage ignores any armour.
- Inflict damage using a pistol or small blade-sized weapon.
- Escape and move away (as a normal movement action), ending the grapple.
- Drag their opponent up to three metres.
- Continue the grapple with no other effect.

WEAPON TRAITS

Some weapons have additional special rules that affect their use. These special rules are listed under the Traits section of a weapon's description and are detailed here.

AP X: This weapon ignores an amount of Protection equal to the AP score listed.

Auto X: These weapons fire multiple rounds with every pull of the trigger and can make attacks in three fire modes: single, burst and full auto. Attacks using the Auto trait lose the benefits of the Scope trait and aiming.

- **Single**: Attacks are made using the normal combat rules.
- **Burst**: Add the Auto score to damage. This uses a number of rounds equal to the Auto score.
- **Full Auto**: Make a number of attacks equal to the Auto score. These attacks can be made against separate targets so long as they are all within six metres of one another. Full auto uses a number of rounds equal to three times the Auto score.

Bulky: A Bulky weapon has a powerful recoil or is extremely heavy. A Traveller using a Bulky weapon must have STR 9 or higher to use it without penalty. Otherwise, all attack rolls have a negative DM equal to the difference between their STR DM and +1.

Scope: The weapon has a vision-enhancing sight, increasing its effectiveness from greater range. A weapon with the Scope trait ignores the limit on attacks made at a range greater than 100 metres that treats them as if they are at Extreme range, so long as the Traveller aims before shooting.

Stun: These weapons deal non-lethal damage, incapacitating a living target rather than killing it. Damage is only deducted from END, taking into account any Protection. If the target's END is reduced to 0, the target is incapacitated and unable to perform any actions for a number of rounds by which the damage exceeded their END. Damage from Stun weapons is completely healed by one hour of rest.

Zero-G: This weapon has little or no recoil, allowing it to be used in low or zero gravity situations without requiring an Athletics (dexterity) check.

ENCOUNTERS & DANGERS

When adventuring through the universe, a Traveller has a great deal more to be worried about than finding themselves in the middle of a battle. This chapter covers the dangers and hazards that can be found among the stars and how Travellers can avoid them.

ENVIRONMENTAL DANGERS

DISEASES

Diseases reduce a Traveller's characteristics, starting with END. The Traveller must make a series of END checks to resist the effects of the disease. If the Traveller fails an END check, they take the listed damage and must make another END check a few hours or days later, depending on the Interval of the disease. Once an END check has been passed, the Traveller has fought off the disease.

Disease	END check Difficulty	Damage	Interval
Anthrax	Very Difficult (12+)	2D	1D days
Biological Weapon	Formidable (14+)	3D	1D hours
Pneumonia	Average (8+)	1D	1D weeks
Regina Flu	Routine (6+)	1D-2	1D days

FALLING

A Traveller who falls on a 1-gravity world suffers 1D damage for every two metres they fall. High- or low-gravity worlds (see Gravity on page 28) will increase or decrease the damage by 1D for every four metres fallen. A Traveller who make a successful Athletics check can reduce the distance fallen for the purposes of calculating damage by a number of metres equal to the Effect of their check. Armour does not protect against damage sustained from falling.

GRAVITY

Grav plates are common on spacecraft and space stations and so Travellers may spend most of their lives in comfortable Earth-like gravity (1G). However, grav plates can malfunction and once a Traveller steps off their ship onto the surface of a world, they become subject to the effects of gravity.

High Gravity: Environments that have a gravity of 1.4 G or more (typically worlds of Size 10) are classed as being High Gravity. Humans find high-gravity worlds unpleasant. Especially high-gravity worlds require the use of pressured or powered suits to support the human frame. Travellers on high-gravity worlds suffer DM-1 to all skill checks until they acclimatise, a process that takes 1D weeks. Travellers with the Athletics (strength) skill acclimatise within 1D days.

Low Gravity: Environments that have a gravity of 0.7 G or less (typically worlds of Size 6 or smaller) are classed as being Low Gravity. Humans tend to find life on low-gravity worlds to be initially pleasant but regular exercise regimes and medicinal supplements are required to prevent bone and muscle degradation. Those who spend too long on low-gravity worlds cannot tolerate higher gravities. Travellers on low-gravity worlds suffer DM-1 to all physical skill checks until they acclimatise, a process that takes 1D weeks. Travellers with the Athletics (dexterity) skill acclimatise within 1D days.

Zero Gravity: A Traveller in a zero-gravity situation suffers all the effects of Low Gravity (the world Size is assumed to be 0). In addition, they must be careful to watch for things that can affect their momentum – most notably, firing weapons that have recoil. Every time the Traveller uses a close combat weapon or any ranged weapon that does not have the Zero-G trait, they must make an Average (8+) Athletics (dexterity) check or not only automatically miss their target but start to spin helplessly out of control. A Traveller spinning out of control in zero gravity may regain control with an Average (8+) Athletics (dexterity) check.

POISONS

Poisons operate in the same way as diseases but generally work much faster and often have a wider range of effects.

RADIATION

Radiation is a constant danger throughout space. Spacecraft hull materials shield against most radiation, reducing the exposure suffered by most spacers to only a few times that of being planetside. Travellers in vessels flying too close to a star or with breached hulls

Disease	END check Difficulty	Damage	Interval
Arsenic	Difficult (10+)	2D	1D minutes
Tranq Gas	Difficult (10+)	Unconscious	1D seconds
Neurotoxin	Very Difficult (12+)	1D INT	1D seconds

or damaged reactors risk exposure and the presence of harmful radiation on worlds or in combat means Travellers must be wary.

Radiation exposure is measured in rads. Once a Traveller has absorbed a certain number of rads, they suffer the effects of radiation. One problem with radiation exposure is that while physical symptoms can be treated and may heal, the cumulative effects of the radiation never go away. The Traveller's rads must be kept track of and further exposure adds to what the Traveller is already suffering until a deadly level is reached. Accumulated rads can only be removed by using anti-rad drugs.

Radiation effects are suffered each time a Traveller is exposed to radiation and as a result of cumulative rads over time. Thus a Traveller who has absorbed 75 rads in the past and subsequently recovered from the effects, who then absorbs another 20 rads from a solar flare, now has a total of 95 rads, whether they suffer any serious effects this time or not. They are fast approaching a moderate dose, as shown on the Radiation Effects table.

Radiation Exposure

Radiation Source	Rads Received
Minor reactor leak	2D/hour
Serious reactor leak	2D/20 minutes
Minor solar flare	1D x 100/hour
Major solar flare	3D x 100/hour
Radiation weapon	2D x 20 immediately

Vacc suits and other measures of protection reduce radiation exposure, as shown on page 34. The hull of a spacecraft decreases the radiation exposure of those inside by 500.

SUFFOCATION

A spacecraft or self-contained, sealed structure with power can usually sustain life support for one person per stateroom for one month comfortably and for six months at a stretch (number of staterooms x 5,000 person/hours). Without power, this drops to two weeks at most. Various shelters list the amount of air and life support available if they differ.

Without life support, a Traveller begins to suffocate, suffering 1D damage each minute. A Traveller who is utterly without air (such as one being smothered or strangled or who has been thrown out of an airlock) suffers 1D damage each round.

TEMPERATURE

Unusually hot or cold worlds can cause damage (starting with END) unless the Travellers are suitably protected. Temperatures are in Celsius.

VACUUM

If a Traveller finds themselves outside of a spacecraft without a vacc suit, in the cold vacuum, they are in very big trouble. Any air in the lungs is expelled violently, blood boils and skin bloats and stretches. The Traveller has seconds at best to get to safety. Any Traveller exposed to vacuum suffers a cumulative 1D damage every round. Thus, the Traveller will suffer 1D damage in the first round, 2D damage in the second round, 3D damage in the third and so on.

Radiation Effects

Immediate Radiation Exposure	Immediate Effects	Cumulative Radiation	Exposure Cumulative Effects
50 rads or less	None	50 rads or less	None
51–150 rads	1D damage, Nausea (-1 to all checks until medical treatment received)	51– 150 rads	None
151–300 rads	2D damage	151– 300 rads	-1 END permanently
301–500 rads	4D damage, hair loss	301– 500 rads	-2 END permanently
501–800 rads	6D damage, sterile	501– 800 rads	-3 END permanently
801 rads or more	8D damage, internal bleeding	801 rads or more	-4 END permanently

Heat	Effect	Cold	Effect
50 (very hot desert)	1D/hour	-25 (Arctic)	1D/hour
200 (~Mercury)	1D/round	-50 (~Mars)	2D/hour
500 (~Venus)	2D/round	-200 (~Pluto)	1D/round
Burning Torch	1D/round	Industrial Freezer	1D/round
Welding Torch	2D/round	Liquid Nitrogen	2D/round
Inferno	3D/round	—	—

HEALING

With all the dangers present, it is inevitable that Travellers will get hurt. Fortunately, there are several options to heal and repair oneself. There are two forms of healing – medical treatment and natural healing. Note that failed Medic checks can easily end up causing the patient more damage.

MEDICAL TREATMENT

First Aid: Applying first aid restores a number of characteristic points equal to the Effect of a Medic check (EDU), for a minimum of one point. Points restored by first aid are divided as desired among all damaged physical characteristics. First aid requires at least basic medical equipment (such as a medikit), must be initiated within one minute of the injury and can only be successfully applied once.

Surgery: A Traveller who still has three damaged characteristics after first aid has been applied requires surgery. Surgery restores characteristic points just like first aid but if the check is failed, the patient loses more characteristic points equal to 3+ the Effect of the Medic check (EDU). Surgery requires a hospital or medical bay. Once one characteristic is back to its maximum level, the patient can benefit from medical care.

Medical Care: A Traveller who has only one or two damaged characteristics after first aid has been applied, or who has had one of their three physical characteristics restored to normal through surgery, can benefit from medical care. Medical care restores 3+ the Traveller's END DM + the doctor's Medic skill in characteristic points per day, divided evenly among all damaged characteristics. Medical care requires a hospital or medical bay and for the Traveller to undergo full bed rest.

Mental Characteristics: Travellers can also suffer damage to INT or EDU (the latter reflecting loss of memory). Unless otherwise specified, each heals at a rate of one point each per day.

NATURAL HEALING

An injured Traveller regains a number of characteristic points equal to 1D + END DM per day of full rest. A Traveller who requires surgery only regains characteristic points equal to their END DM per day of rest, which means that the Traveller may never heal naturally and will even get worse if their END DM is currently negative, and it probably will be.

UNCONSCIOUSNESS

An unconscious Traveller may make an END check after every minute. If successful, they regain consciousness. If they fail, they must wait another minute before trying again, this time with a cumulative DM+1 for every previous check failed.

ENCOUNTERS

Throughout their adventures, Travellers have the opportunity to meet many strange animals, aliens, robots and other potential hostiles. When the Referee determines an encounter has occurred, it is important to know exactly where potential hostiles are and when Travellers become aware of them. During encounters, a range band system is used for convenience, as shown on the Range Band table.

Range Band

Range	Distance to Target
Close	Up to 5 metres
Short	5–10 metres
Medium	11–50 metres
Long	51–250 metres
Very Long	251–500 metres
Distant	501–5,000 metres
Very Distant	Over 5 kilometres

Roll on the Encounter Distance table to determine when the Travellers might first become aware of the potential danger, adding the appropriate modifiers.

Encounter Distance

2D	Range Band
2 or less	Close
3	Short
4–5	Medium
6–9	Long
10–11	Very Long
12 or more	Distant

Apply the following modifiers:

Clear Terrain	DM+3
Forest or Woods	DM-2
Crowded Area	DM-2
In Space	DM+4
Target is a Vehicle	DM+2 for every 10 tons of Shipping or part of
Travellers actively looking for danger	+ Highest Recon skill

Under normal circumstances, Travellers automatically spot the target as an item of interest (at least) and are able to start taking appropriate action. However, if the target is attempting to remain hidden, perhaps get closer before launching an attack or simply to remain in place to observe passers-by, the Travellers must spot the target before they can take action against it.

This is normally accomplished with a Recon check opposed by the target's Stealth. Use of basic optical devices by the Travellers or camouflage by the target can impose modifiers of DM+1 to +3 at the Referee's discretion. However, when an electronic sensor is being used, the Electronics (sensors) skill replaces Recon.

ANIMALS

Many worlds in the galaxy are capable of bearing life and evolution (or genetic engineering) has produced bizarre creatures, forming complex ecosystems. Animals are defined by a handful of characteristics as shown in the example here, a larker – a massive but gentle insect found on the open grassy plains where it grazes on long foliage.

Animal	Hits	Speed
Larker	100	9 m
Skills	Athletics (endurance) 2, Athletics (strength) 4, Survival 2	
Attacks	Charge (5D)	
Traits	Armour (+12), Large (+4)	
Behaviour	Herbivore, Grazer	

- **Hits**: How much damage the animal can sustain before it is killed. All damage is applied to Hits, rather than STR, DEX and END as for Travellers. When an animal's Hits are reduced to zero, it is dead.
- **Speed**: How far the animal can move in a single combat round with a Minor Action.
- **Skills**: Any skills the animal is able to perform are listed here, together with their DM. Unless otherwise stated, all animals have Athletics 0 and Survival 0.
- **Attacks**: Any attacks the animal is capable of are listed here, together with any damage dealt.
- **Traits**: These are special rules the animal has that determine its abilities beyond Hits, Skills and Attacks. Some animals are Amphibious, for example, while others are Very Large.
- **Behaviour**: Animals act in specific ways according to their place within an ecosystem. An animal's behavioural characteristics are detailed further on page 31.

TRAITS

The following traits may be applied to animals of the Referee's creation:

Alarm: When panicked or threatened, this animal emits a powerful screech, odour or a bright visual display, alerting others of its kind to danger. This either causes all animals of the same type in the immediate area to flee or bring an additional 2D of them into combat.

Amphibious: The animal is equally at home on land or in the water. It will not suffocate while submerged and its movement is not affected underwater.

Armour (+X): The animal has dense layers of fat, horny plates or some other form of physical protection. It has a Protection score equal to the figure shown in the Armour trait.

Bioelectricity (+X): The animal naturally generates a powerful electric current that is discharged when it makes an attack. With each successful attack, the animal will cause an additional amount of damage with the Stun trait, as listed in its Bioelectricity trait.

Camouflaged: The animal has physical adaptations that allow it to blend into its environment, such as chameleonic skin or psionic shielding. It gains DM+2 to all Stealth checks.

Echolocation: This animal has organs that emit high-frequency sounds, which it uses to pinpoint objects and 'observe' its surroundings with high precision. It can operate in complete darkness, although two-dimensional details (such as writing on a page) cannot

be made out. Echolocation can operate in noisy environments but can be blocked by sounds operating at similar high frequencies.

Fast Metabolism (+X): The animal has a heightened metabolism and very fast reactions. It gains a DM to Initiative rolls equal to the figure shown in the Fast Metabolism trait.

Heightened Senses: The animal has better hearing and sense of smell than humans. It receives DM+1 to any Recon and Survival checks it has to make.

IR/UV Vision: The animal views the world at a greatly extended electromagnetic range, including infrared or ultraviolet wavelengths and perhaps others. This allows it to see clearly in darkness and, at the Referee's discretion, it may notice certain electromagnetic emissions from the equipment of Travellers.

Large (+X): The animal is extremely large and presents a huge target. All ranged attacks made against the animal gain a DM equal to the score listed in the Large trait.

Poison (Difficulty/Damage/Interval): The animal's attacks are poisoned, making them much deadlier. The difficulty, damage and interval of the poison is noted within the Poison trait.

Slow Metabolism (-X): The animal has a lethargic metabolism and very slow reactions. It suffers a DM to Initiative rolls equal to the figure shown in the Slow Metabolism trait.

Small (-X): The animal is very small and presents a difficult target. All ranged attacks made against the animal suffer a DM equal to the score listed in the Small trait.

BEHAVIOUR

Regardless of their world of origin or biochemistry, most creatures fall into the following categories; Herbivores, Omnivores, Carnivores and Scavengers. These categories are further broken down into other categories, such as Grazers and Filters. Terran creatures that exemplify these behaviours are noted in each description. Suggested traits and skills are noted after the description – the exact level of skills varies depending on that creature, as defined by the Referee.

Carrion-Eater (vulture): Scavengers that wait for all other threats to disperse before pursuing prey. Carrion-eaters have Recon.

Chaser (wolf): Animals that kill their prey by attacking and exhausting it after a chase. Chasers have Athletics (dexterity and/or endurance).

Eater (army ant): Eaters will eat anything they encounter, including Travellers.

Filter (earthworm): Herbivores that pass their environment through their bodies. Unlike grazers, which move to food, filters move a flow of matter through themselves and filter out the food.

Gatherer (raccoon, chimpanzee): Herbivores that collect and store food. Gatherers have Stealth.

Grazer (antelope): Grazers move from food source to food source, often in large packs. Their primary form of defence is to flee danger.

Hunter (baboon): Opportunistic predators that stalk easy prey. Hunters have Survival.

Hijacker (lion): Scavengers that steal the kills of others through brute force or weight of numbers.

Intermittent (elephant): Herbivores that do not devote their entire time to searching for food.

Intimidator (coyote): Scavengers that establish their claim to food by frightening or intimidating other creatures. Intimidators have Persuade.

Killer (shark): Carnivores that possess a raw killing instinct, attacking in a frenzied manner. Killers have Melee.

Pouncer (cat): Pouncers kill by stalking and ambushing their prey. Pouncers have Stealth, Recon and Athletics (dexterity or strength).

Reducer (vermin): Reducers are scavengers that act constantly on all available food, devouring even the remains left by other scavengers.

Siren (Venus fly-trap): Sirens create a lure to attract prey. Usually, this is specific to the species the siren preys on but some rare lures are universal. Sirens have Deception.

Trapper (spider): An animal that allows its prey to enter a trap. Generally, any creature surprised by a trapper is caught in its trap.

EQUIPMENT

The vast number of tools and devices in the universe and variation in costs and values defy classification; it is impossible to define them all. The objects in this chapter are indications of common qualities and values. Different worlds use different manufacturing techniques, design styles and physical principles to achieve the same effect. A pistol on one world might resemble a conventional firearm; on another, the same gun might be elaborately decorated and coloured to reflect its importance in that world's martial culture; elsewhere, it might be heavily integrated with computers, to aid targeting, or use bullets formed from exotic materials to avoid detection by security sensors.

Each item is listed with the Tech Level needed to manufacture it, its mass (in kg) and cost. If weight or cost is not listed, then its weight or cost is negligible. In this case, you can assume that 10 such items would mass one kilogram or cost Cr1 respectively. You should note that items are available for several Tech Levels after they first appear but it is often quite hard to find a low-tech item on a high-tech world (few TL13 spacefaring civilisations are going to produce a lot of crossbows or backpack radios).

CREDITS

The Credit (Cr) is the standard unit of currency in *Traveller*. Larger denominations include the MegaCredit (MCr1 or Cr1000000). It is assumed that the physical Credit is minted by the dominant empire of the universe and is virtually impossible to falsify.

Encumbrance

Under most circumstances, the Referee can rule that Travellers can carry a 'reasonable' amount of equipment without tracking it – armour, a weapon or two, a few grenades and items in a backpack are all reasonable. However, there may be times when Travellers attempt to carry a heavier load.

First, consider how they are carrying something. Six rifles do not weigh that much but without a pack or bundle they are not easy to carry. When Travellers carry a lot of items, the Referee should ask where or how they are being carried. Most items have a listed Mass and a Referee can use this to limit what is being carried. A Traveller can carry equipment totalling a number of kilograms equal to their combined STR and END without penalty, plus any levels in Athletics (strength and/or endurance). Travellers can carry up to twice this amount but suffer DM-2 on all physical actions while they do so.

Jack armour

Unless otherwise noted, only one type of armour can be worn at a time but there are exceptions. Some armours have a required skill. A Traveller suffers DM-1 to all checks taken, when wearing the armour, per missing skill level. For example, a Traveller with Vacc Suit skill 0 who is in a suit that requires Vacc Suit 2 would have DM-2 to all their checks. Not having the skill at all inflicts the usual DM-3 unskilled penalty instead. Some armour provides a measure of defence against radiation, as noted in the Rad column. This amount is deducted from rads a Traveller receives when exposed to radiation.

ARMOUR

THE *CORE* COLLECTION

Cloth is a heavy duty body suit tailored from ballistic cloth. The fabric absorbs impact energy and spreads it over the body.

Reflec armour is a flexible plastic suit with layers of reflective material and heat-dispersing gel. It is highly effective against lasers but provides no protection against other attacks. Reflec can be worn with other armour but is hard to obtain, quite expensive and imposes DM-2 on Stealth checks.

Jack is a natural or synthetic leather jacket or body suit covering the torso and upper arms and legs.

Vacc Suit: The vacc suit or space suit is the spacer's best friend, providing life support and protection when in space. Early vacc suits are unwieldy and uncomfortable but quickly shrink as technology advances. A vacc suit provides life support for six hours.

ARMOUR TYPE	PROTECTION	TL	RAD	KG	COST	REQUIRED SKILL
Jack	+1	1	—	2	Cr50	None
Cloth	+5	7	—	3	Cr250	None
Reflec	+10 (vs. lasers only)	10	—	1	Cr1500	None
Vacc Suit	+4	8	15	28	Cr12000	Vacc Suit 1
	+8	10	60	12	Cr10000	Vacc Suit 0
	+10	12	90	8	Cr20000	Vacc Suit 0

AUGMENTS

THE *CORE* COLLECTION

Most of the items in this category can be cybernetic (mechanical or electronic implants and prostheses) or biological (genetic engineering and surgical alternation) or both (a more common solution) but the general term of 'augment' is used for all of them.

Augments can interfere with medical treatment. All long-term care or surgery Medic checks treating an augmented Traveller suffer a negative DM equal to the difference in Tech Level between the medical facility and the highest relevant implant. For example, a Traveller with TL15 Endurance Augmentation implants being treated in a TL10 hospital would inflict DM-5 to the surgeon's Medic skill checks.

INSTALLING AUGMENTS

The installation of any augments into a Traveller requires surgery. It is assumed that any reputable augments dealer the Traveller visits has access to first-class hospital services and so should be no actual danger in the process. However, it does take time; typically 1D weeks, although this is often reduced through the use of the Slow Drug (see page 39).

Subdermal armour adds a mesh of ballistic fibres to the skin and reinforces the bones, giving the Traveller extra armour. Subdermal armour stacks with other protection.

A **neural comm** has identical capacities to a standard comm but the cost and required TL are much higher. A Traveller can access the capabilities of a neural comm by thought alone but still requires a skill check for complicated activities.

Skill augmentation rewires the Traveller's nervous system to be more suited to a particular task. For example, a pilot might have their reflexes and sense of balance improved. A skill augmentation gives the Traveller DM+1 when using that specific skill. A Traveller can only have one skill augmentation and must initially possess that skill at least at level 0 to benefit from the augmentation.

A **wafer jack** is a computer system implanted into the base of the skull that contains a physical data socket and processor running an interface program. A Traveller with a wafer jack can use Expert programs for tasks relying on INT or EDU only. It is much smaller and more discrete than a hand computer and the user can access the Expert program by thought alone. A wafer jack has Computer/2 for Expert programs only and is always running an Intelligence Interface that does not use any Bandwidth, so that it may all be used for Expert software. Swapping out software is done with physical media and not possible in the heat of the moment.

AUGMENT	IMPROVEMENTS	TL	COST
Enhanced Vision	Binoculars, IR/Light Intensification	13	Cr25000
Neural Comm	Audio only	10	Cr1000
Neural Comm	Audio and visual, Computer/0	12	Cr5000
Skill Augmentation	Skill DM+1	12	Cr50000
Subdermal Armour	Protection +1	10	Cr50000
Wafer Jack	Capacity Bandwidth/4	12	Cr10000

Commdot

Communications technology rapidly merges with computer technology at higher Tech Levels. Above TL8 in most cultures, it is unthinkable to be out of touch except in the most remote areas, with even short-ranged devices able to connect to a planetary-wide communications grid.

COMMUNICATIONS

THE *CORE* COLLECTION

A **transceiver** is a stand-alone communications device, a two-way radio. Unlike a mobile comm, which relies on the presence of a communications network, a transceiver can send and receive directly under its own power. Most transceivers are radio or laser-based. To reach orbital ranges reliably, a transceiver requires a range of 500 kilometres.

A **commdot** is a tiny microphone/speaker and transmitter, ranging in size between a few centimetres and a few millimetres across. A commdot is capable of interfacing with other communications devices and relaying messages back and forth. Commdots have a range of only a few metres and are usually used as hands-free communicators but can also be used as improvised bugs or throat microphones.

ITEM	TL	MASS	COST
Commdot	10	—	Cr10

A **mobile comm** unit is a portable telecommunications device/computer/camera, ranging in size from a bulky handset to a slim watch or pen-like cylinder – in today's world we call them mobile phones or cell phones. Larger comms have physical controls and screens while smaller units either project data and control displays onto nearby surfaces, have fold-out plastic screens or connect to cybernetics. Comms have only short-range transmission and reception capabilities but most technologically advanced worlds have planet-wide comm networks, allowing the user to send messages and access data anywhere.

TL	FEATURES	COST
TL6	Audio only	Cr50
TL8	Audio and visual, Computer/0	Cr150
TL10	Multiple forms of data, Computer/1	Cr500

RADIO TRANSCEIVERS	MASS (KG)	RANGE (KM)	COST
TL8	—	50	Cr75
TL9	—	500	Cr500
TL9 (Computer/0)	—	2,500	Cr5000
TL12 (Computer/0)	1	10,000	Cr1000
TL14 (Computer/1)	—	3,000	Cr500
LASER TRANSCEIVERS			
TL9 (Computer/0)	1.5	500	Cr2500
TL11 (Computer/0)	0.5	500	Cr1500
TL13 (Computer/1)	—	500	Cr500

Portable Computer

Any technological society runs on computers, with access to them as basic as the right to air and water. To those both knowledgeable and skilled, computers open a vast array of possibilities in all areas of life and having the right computer for the right job is usually more important than carrying a gun.

COMPUTERS & SOFTWARE

THE *CORE* COLLECTION

Computers in Traveller are ranked by their Processing score. A Computer/3, for example, has a Processing score of 3. This is its ability to run software. Note that the storage capacity of computers is not used in Traveller as, beyond TL8, the capacity of even a modest computer is effectively unlimited.

All software has a Bandwidth score, which represents the processing power a computer requires in order to run it. At any one time, a computer can run a number of software packages whose combined Bandwidth does not exceed its Processing score. A Traveller can use any high-Bandwidth software at a lower Bandwidth, to a minimum of the lowest Bandwidth shown. For example, a Traveller could run Intrusion/3 on a Computer/1 but it would only function as Intrusion/1.

A computer with Processing 0 can only run one software package of Bandwidth 0 at a time. Note that Processing does not limit how much software a computer can store and have ready to use, just how many software packages can be active and useable at any one time. A computer must be of a TL equal to or greater than that of the software in order to be able to run it, regardless of available Bandwidth.

A **portable computer** is a computer system with considerable processing power, yet able to be easily carried. It is more powerful than a computer terminal and can be used without access to a network.

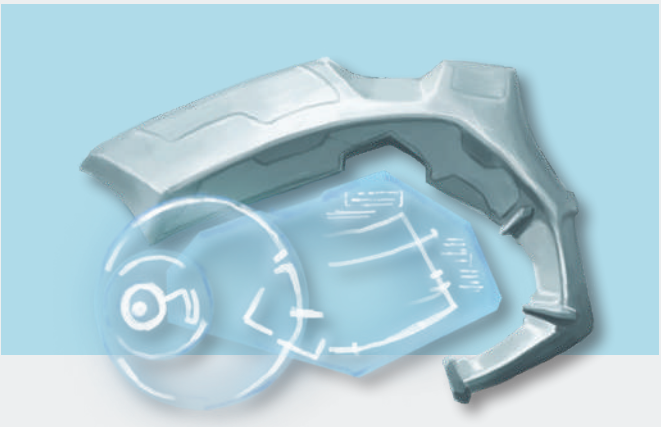
TL	PROCESSING	MASS	COST
TL8	Computer/1	2 kg	Cr250
TL10	Computer/2	0.5 kg	Cr500
TL12	Computer/3	0.5 kg	Cr1000
TL13	Computer/4	0.5 kg	Cr1500
TL14	Computer/5	0.5 kg	Cr5000

SOFTWARE	BANDWIDTH	TL	COST	EFFECT
Interface	0	TL7	Included	Displays data.
Intelligent Interface	1	TL11	Cr100	Allows voice control and displays data intelligently. Required for using Expert software.
Security	0 1 2 3	TL8 TL10 TL11 TL12	Included Cr200 Cr1000 Cr20000	Defends against intrusion. Security/0 requires an Average (8+) Electronics (computers) check to successfully bypass. Difficult (10+) difficulty. Very Difficult (12+) difficulty. Formidable (14+) difficulty.
Intrusion	1 2 3 4	TL10 TL11 TL13 TL15	Cr1000 Cr10000 Cr100000 MCr1	Intrusion software packages aid hacking attempts, giving a bonus equal to their Bandwidth. Intrusion software is often illegal.
Expert	1 2 3	TL11 TL12 TL13	Cr1000 Cr10000 Cr100000	Expert software packages mimic skills. A Traveller using Expert may make a skill check as if they had the skill at the software's Bandwidth -1. Only INT and EDU-based checks can be attempted. If a Traveller already has the skill, then Expert grants DM+1 to their check.
Translator	0 1	TL9 TL10	Cr50 Cr500	Translators are specialised Expert packages that only have Language skills. The TL9 version provides a near-real-time translation. The TL10 works in real-time and has a much better understanding of the nuances of language.
Database	—	TL7	Cr10–10000	A database is a large store of information on a topic that can be searched with an Electronics (computers) check or using an Agent.
Intellect	1 2 3	TL12 TL13 TL14	Cr2000 Cr50000 Cr200000	Intellect uses Expert systems, simultaneously offering a number of skills equal to its Bandwidth.

EXPERT SKILLS

Having a tool or weapon with the appropriate Expert program and an Intelligent Interface can grant a Traveller DM+1 to relevant checks. However, the program can only help if the difficulty of the task is less than a certain value. In combat, add up any negative DMs to determine the effective difficulty of the attack or action.

SOFTWARE PACKAGE	MAXIMUM DIFFICULTY
Expert/1	Difficult (10+)
Expert/2	Very Difficult (12+)
Expert/3	Formidable (14+)



Data Display/Recorder

Medikit Drugs (TL8+): There are different types of medikit available at different Tech Levels. All medikits contain diagnostic devices and scanners, surgical tools and a panoply of drugs and antibiotics. Advanced medikits can help with more exotic problems or when treating augmented individuals. For example, a TL8 medikit can test blood pressure and temperature, while a TL14 kit has a medical densitometer to create a three-dimensional view of the patient's body and can scan brain activity on the quantum level. All medikits mass 1 kilogram, except at TL14 where they have an effective mass of 0 kilograms.

TL8: Costs Cr1000.
TL10: Grants DM+1 on Medic checks performed for first aid. Costs Cr1500.
TL12: Grants DM+2 on Medic checks performed for first aid. Costs Cr5000.
TL14: Grants DM+3 on Medic checks performed for first aid. Costs Cr10000.

Most supplies require a Traveller with the Medic skill to use properly. These items are mostly useful only in emergencies, such as when a Traveller is injured and far away from a hospital facility.

Healing: An injured Traveller who needs hospital care for a prolonged period will pay approximately Cr250 per month per Tech Level (at TL11+ doctors may just use Medicinal Slow in many cases). Surgery costs 1D x Cr50 x Tech Level.

Replacements: A Traveller whose injuries require cloning limbs or cybernetic replacement must pay Cr5000 per characteristic point lost.

MEDICAL & CARE SUPPLIES

THE *CORE* COLLECTION

DRUGS

Anti-rad (TL8): Anti-rad drugs must be administered before or immediately (within 10 minutes) after radiation exposure. They absorb up to 100 rads per dose. A Traveller may only use anti-rad drugs once per day – taking any more causes permanent END damage of 1D per dose. Costs Cr1000 per dose.

Fast Drug (TL10): Also called Hibernation, this drug puts the user into a state akin to suspended animation, slowing their metabolic rate down to a ratio of 60:1 – a subjective day for the user is actually two months. Fast drug is normally used to prolong life support reserves or as a cheap substitute for a cryoberth. Fast drug costs Cr200 per dose.

Medicinal Drugs (TL5+): Includes vaccines, antitoxins and antibiotics. They range in cost from Cr5 to several thousand Credits, depending on the rarity and complexity. Medicinal drugs require the Medic skill to use properly – using the wrong drug can be worse than doing nothing.

Slow Drug (TL11): This is a variant of the metabolic accelerator. It can only be applied safely in a medical facility where life-support and cryotechnology is available, as it increases the metabolism to around 30 times normal, allowing a patient to undergo a month of healing in a single day. Using this drug outside of a hospital or medical bay is a messy and painful way to commit suicide, as the user will rapidly cook their internal organs and suffer massive brain damage. Slow drug costs Cr500 per dose.

Light Intensifier Goggles

Most sensors are designed to be plugged into a computer system but can display the data directly to the user on built-in screens or by feeding it to the user's suit display.

SENSORS

THE *CORE* COLLECTION

SENSOR	TL	KG	COST
Binoculars	8	1	Cr750
	12	1	Cr3500
Bioscanner	15	3.5	Cr350000
Densitometer	14	5	Cr20000
EM Probe	10	1	Cr1000
Geiger Counter	10	—	Cr150
IR Goggles	6	—	Cr500
Light Intensifier Goggles	7	1	Cr500
NAS	15	10	Cr35000

Binoculars allow the user to see further. At TL8, electronic enhancement allows images to be captured; light-intensification allows them to be used in the dark. At TL12, PRIS (Portable Radiation Imaging System) allows the user to see in the EM spectrum, from infrared to gamma rays.

A **bioscanner** 'sniffs' for organic molecules and tests chemical samples. It can be used to detect poisons or bacteria, analyse organic matter, search for life signs and classify unfamiliar organisms.

The remote **densitometer** uses an object's natural gravity to measure its density, building up a three-dimensional image of the inside and outside of an object.

The **EM Probe** detects electromagnetic emissions and can be used as a diagnostic tool when examining equipment or when searching for hidden bugs or devices.

A **Geiger counter** detects radiation.

IR goggles permit the user to see heat-emitting sources in the dark while **light intensifier goggles** enable users to see normally in anything less than total darkness, by intensifying any available light.

The **neural activity scanner (NAS)** consists of a backpack and detachable handheld unit that detects neural activity and a rough estimation of the intelligence level of organisms up to 500 metres away.

Artificial Gill

Habitat Module: A modular unpressurised quarters for six people, capable of withstanding anything less than hurricane-force winds. Includes survival rations and battery power to last a week. Requires 12 man-hours to assemble and can be attached to other modules to form a base.
TL10: The TL10 module is pressurised and includes life-support for six occupants for one week (1,000 person/hours).

Respirator: This rebreather concentrates inhaled oxygen, allowing a Traveller to breathe on worlds with a thin atmosphere. Respirators take the form of a face mask or mouthpiece initially.
TL10: The more advanced respirator is small enough to fit into the nose or can even be a lung implant.

SURVIVAL GEAR & SUPPLIES

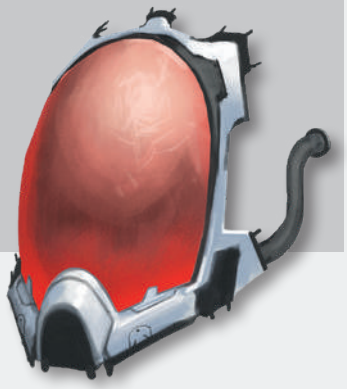
THE *CORE* COLLECTION

SURVIVAL GEAR	TL	KG	COST
Artificial Gill	8	4	Cr4000
Breather Mask	8	—	Cr150
Climbing Kit	4	4	Cr100
Environment Suit	8	1	Cr500
Filter Mask	7	—	Cr100
Grav Belt	12	6	Cr100000
Habitat Module	8	1,000	Cr10000
Portable Fusion Generator	10	20	Cr500000
Respirator	6	—	Cr100
Tent	3	6	Cr200

An **Artificial Gill** extracts oxygen from water allowing the wearer to breathe underwater. Only works on worlds with breathable atmospheres (Atmosphere 4–9).

Breather Mask: Combines filter and respirator into a single package.
TL10: The more advanced filter is small enough to fit into the nose or can even be a lung implant.

Breather Mask



Respirator

Filter masks strip out harmful elements from the air, such as dangerous gases or dust particles. **Respirators** are rebreathing masks that concentrate inhaled oxygen, allowing a Traveller to breathe on worlds with a thin atmosphere. **Breather masks** combine filter and respirator into a single package.

A **climbing kit** is a set of accessories designed to make climbing easier, including a safety harness, gloves and rock shoes, belt with secure holders for tools and head protection. The kit provides DM+1 to attempts to climb rock surfaces.

The **environment suit** is designed to protect the wearer from extreme cold or heat and has a hood, gloves and boots but leaves the face exposed. A mask or rebreather can be attached.

A **grav belt** is a harness worn across the body, equipped with artificial gravity modules, allowing the Traveller to fly at Medium speed. Its battery can be operated for a maximum of four hours.

A basic **tent** provides shelter for two people against the weather. A **habitat module** is a modular unpressurised quarters for six people that includes survival rations and battery power to last a week. Requires 12 person-hours to assemble and can be attached to other modules to form a base.

A **portable fusion generator** is a light-duty appliance, capable of recharging weapons and other equipment for up to one month of use.

TOOLKITS

Technical skills require specialist tools. These kits contain diagnostic sensors, hand tools, computer analysis programs and spare parts. Toolkits may be purchased at higher Tech Levels and will be much more capable at fulfilling tasks. If a toolkit is at least two Tech Levels higher than the item or task that is being worked upon, it grants DM+2 to related checks. However, if a toolkit is two Tech Levels or more lower than the item or task that is being worked on, it inflicts DM-2 on related checks.

TOOLKITS	TL	KG	COST
Electronics	7	2	Cr2000
Engineering	12	12	Cr4000
Forensics	8	12	Cr2000
Mechanical	5	12	Cr1000
Scientific	5	8	Cr2000
Surveying	6	12	Cr1000

Cutlass

The galaxy can be a dangerous place. Whether the Travellers find themselves on a lawless world, a dangerous warzone or in the outback of a hostile alien planet, they might require the means to defend themselves or to fend off or hunt alien prey. Following is a selection of weapons to choose from.

WEAPONS

THE *CORE* COLLECTION

MELEE WEAPONS

WEAPON	TL	RANGE	DAMAGE	KG	COST	MAGAZINE	MAGAZINE COST	TRAITS
Blade	2	Melee	2D	1	Cr100	—	—	—
Club	1	Melee	2D	2	—	—	—	—
Cutlass	2	Melee	3D	2	Cr200	—	—	—
Dagger	1	Melee	1D+2	0.5	Cr10	—	—	—
Shield	1	Melee	1D	2	Cr150	—	—	—
Stunstick	8	Melee	2D	0.5	Cr300	—	—	Stun
Unarmed	—	Melee	1D	—	—	—	—	—

Blade: A small blade weapon, somewhere between a dagger and a cutlass, with a large basket hilt.

Club: Clubs range from a length of heavy wood to extending riot batons of advanced polymers.

Cutlass: The standard shipboard blade weapon, often kept near airlocks to repel boarders.

Dagger: A small knife weapon, approximately 20–30 centimetres in length.

Shield: A Traveller using a shield increases their effective Melee skill by +1 when parrying. A Traveller with no Melee skill counts as having Melee 1 when using a shield to parry.

Stunstick: A short and innocuous looking weapon, this ceramic stick can deliver a painful and debilitating shock to anyone who touches the wrong end.

SLUG WEAPONS

WEAPON	TL	RANGE(M)	DAMAGE	KG	COST	MAGAZINE	MAGAZINE COST	TRAITS
PISTOLS								
Autopistol	5	10	3D-3	1	Cr200	15	Cr10	—
Body Pistol	8	5	2D	—	Cr500	6	Cr10	—
Gauss Pistol	13	20	3D	1	Cr500	40	Cr20	AP 3, Auto 2
Revolver	4	10	3D-3	0.5	Cr150	6	Cr5	—
Snub Pistol	8	5	3D-3	—	Cr150	6	Cr10	Zero-G
RIFLES								
Accelerator Rifle	9	250	3D	2	Cr900	15	Cr30	Zero-G
Autorifle	6	300	3D	5	Cr750	20	Cr10	Auto 2
Gauss Rifle	12	600	4D	4	Cr1500	80	Cr40	AP 5, Auto 3, Scope
Rifle	5	250	3D	3	Cr200	5	Cr10	—
Shotgun	4	50	4D	4	Cr200	6	Cr10	Bulky
Submachine Gun	6	25	3D	3	Cr400	20	Cr10	Auto 3

The **Autopistol** is a semi-automatic pistol. **Body pistols** are made from plastics and cultured bone, making them difficult to detect by weapons scanners, imposing DM-4 to Electronics (sensors) checks made to detect them. **Gauss pistols** use electromagnetic coils to accelerate metallic darts to hypersonic speeds. **Revolvers** are conventional six-shooter handguns. **Snub Pistols** are lightweight, low-recoil weapons, designed for use aboard spacecraft and in zero G.

Accelerator rifles are for zero-gravity combat. They fire tiny missiles that leave the rifle with minimal velocity and recoil, and then accelerate to high speed. **Autorifles** have a high muzzle velocity and are capable of automatic fire. Like the gauss pistol, **gauss rifles** fire high-velocity projectiles using electromagnetic rails. The **rifle** is a long-range hunting rifle or light infantry weapon. **Shotguns** fire ammunition containing multiple small pellets. Shotguns ignore Dodge dice modifiers, however armour gives double Protection against them. **Submachine Guns** are short, lightweight automatic weapons.

ENERGY WEAPONS

WEAPON	TL	RANGE (M)	DAMAGE	KG	COST	MAGAZINE	POWER PACK COST	TRAITS
PISTOLS								
Laser Pistol	9	20	3D	2	Cr2000	100	Cr1000	Zero-G
Stunner	8	5	2D	0.5	Cr500	100	Cr200	Stun, Zero-G
RIFLES								
Laser Carbine	9	150	4D	4	Cr2500	50	Cr1000	Zero-G
Laser Rifle	9	200	5D	5	Cr3500	100	Cr1500	Zero-G

Laser pistols have no recoil and a large magazine. Higher tech versions are lighter and inflict greater damage. **Stunners** are non-lethal weapons that inflict a massive shock to a target, incapacitating it. **Laser carbines** are shorter and lighter than laser rifles and have a correspondingly shorter range. **Laser rifles** are highly accurate at long range and powered by heavy backpacks.

Laser Rifle

SPACECRAFT OPERATIONS

The term spacecraft covers any interplanetary or interstellar vehicle – anything that can travel through space under its own power. There are subdivisions of spacecraft that further define these vessels.

Ship: A spacecraft of 100 tons or more.
Small Craft: A spacecraft of less than 100 tons. Small craft cannot have jump drives.
Capital Ship: A ship of more than 5,000 tons.
Streamlined Hull: A ship designed to land on worlds with an atmosphere.
Partially Streamlined Hull: These ships may enter atmospheres but are not designed to do so.
Unstreamlined Hull: These ships are non-aerodynamic and cannot safely enter atmospheres.

The size of a ship, its components and cargo is measured in displacement tons, each of which displaces a volume equal to one ton of liquid hydrogen. One displacement ton is about 14 cubic metres.

AIRLOCKS

A ship has at least one airlock per 500 tons. An airlock is large enough for three people in vacc suits to pass through and takes 10 seconds to cycle. Airlocks are locked down from the bridge and require a Very Difficult (12+) Electronics (computers) check to override from the interior or exterior of the ship.

ATMOSPHERIC OPERATIONS

A streamlined ship is designed to enter a planetary atmosphere and fly like a conventional aircraft.

Partial streamlining allows a ship to skim gas giants and enter Atmosphere codes of 3 or less, the same as streamlined ships. In other atmospheres, Pilot checks are made with DM-2.

An unstreamlined ship is non-aerodynamic and risks sustaining serious damage when entering an atmosphere. Pilot checks are made at DM-4 when it enters an atmosphere and for every minute of flight. Each failed check inflicts 1D damage to the ship, ignoring any Armour.

DOCKING AND LANDING

These two procedures are routine and performed whenever a ship travels between systems, so ship captains should be very familiar with them.

LANDING

Landing at a starport requires a Routine (6+) Pilot check (1D x 10 seconds) but most pilots take 1D minutes to perform a landing and gain DM+2 on the task. Ships have landing gear, allowing them to touch down 'in the wild', which requires an Average (8+), Difficult (10+) or even Very Difficult (12+) Pilot check, depending on the terrain. They can also land on bodies of water. Failing a Pilot check while attempting a landing means the ship has landed improperly or even crashed.

DOCKING

Two spacecraft may dock if they are close together and neither ship attempts to resist the manoeuvre. Many airlock designs across charted space are compatible; for incompatible airlocks, ships extend flexible plastic docking tubes that adapt to the target airlock. Docking with another vessel requires a Routine (6+) Pilot check (1D minutes).

BOARDING

Hostile ships may be docked and boarded, although this is a very dangerous operation at all stages.

POWER

Every spacecraft has a power plant. Under normal circumstances, most ships produce enough Power to run all systems and weapons. However, ships may run into power problems if their power plants are damaged during space combat. A ship needs Power points available for each of these listed systems.

Basic Ship Systems: Everything a ship needs for day-to-day operation, including artificial gravity, heating, lighting and life support. The amount of Power needed for basic ship systems is equal to 20% of the total tonnage of the hull.

Manoeuvre Drive: In order to use the manoeuvre drive, the ship requires an amount of Power equal to 10% of the hull's total tonnage multiplied by the ship's maximum Thrust.

Jump Drive: In order to use the jump drive, the ship requires an amount of Power equal to 10% of the hull's total tonnage multiplied by the ship's maximum jump range. Note that this Power requirement is only needed when the ship actually initiates a jump – at all other times, the jump drive remains inert.

Weapons: Most spacecraft weapons have a power requirement. Pulse lasers, which are equipped on the scout/courier ship featured in this book, each have a power requirement of 4.

RUNNING COSTS AND MAINTENANCE

A starship operator faces many costs every four weeks, which must be paid in order to keep on flying. This four-week 'block' is known as a Maintenance Period. Commercial starships usually make two jumps per Maintenance Period. They spend one week in jump, followed by one week in a star system, travelling from the jump point to the local world, refuelling, marketing cargo, finding passengers, leaving the starport and proceeding to jump point again. The week in the system usually provides some time for crew recreation and exploring the planet.

Mortgage or Debts: If the crew are paying off debts on their spacecraft, then these must be paid every Maintenance Period.

Life Support and Supplies: Each stateroom on a ship costs Cr1000 every Maintenance Period, whether it is in use or not. This cost covers supplies for the life support system as well as food and water. Each person on board a ship who is not in a low berth costs an additional Cr1000 every Maintenance Period. Each occupied low berth costs Cr100 every Maintenance Period.

Fuel: Fuel costs Cr500 per ton for refined fuel or Cr100 per ton for unrefined fuel. Fuel is required for both the jump drive and power plant.

Repairs and Maintenance: Maintenance costs 0.1% of the total purchase price of the ship per year and must be carried out every Maintenance Period (divide the year's maintenance cost by 12 to find the Maintenance Period cost). Once per year this should be performed at a shipyard. If maintenance is skipped, roll 2D every subsequent Maintenance Period, with a DM equal to the number of Maintenance Periods skipped. On 8+, the ship suffers a critical hit on the following table .

Poor Maintenance

2D	Critical Hit	Effect
2–4	Fuel Leak	The spacecraft loses 1D x 10% of its fuel capacity.
5–7	Drive Damaged	Roll 1D. On 1–3, the manoeuvre drive is hit; reduce Thrust by -1 and all Pilot checks suffer DM-1. On 4–6, the jump drive is hit and disabled – it may not be used until repaired.
8–9	Weapon Faulty	One random turret (or weapon, if no turrets are present) is damaged DM–1 on all attack rolls made with it.
10–12	Power Plant	The spacecraft's Power is reduced by 25% and it takes 1D extra damage, ignoring armour. All crew suffer 2D x 10 rads per week.

Berthing Costs: Landing at a starport incurs a weekly cost, which varies wildly from world-to-world. See Starports on page 69.

FUEL

Most ships use refined hydrogen as fuel for their fusion power plants engines and jump drives. Starports (see page 69) and virtually any other facility that regularly hosts spacecraft offer refuelling facilities. Hydrogen is obtained from water or the atmospheres of gas giants and costs Cr500 per ton for refined fuel. Lower quality starports offer unrefined fuel for just Cr100 per ton. Using unrefined fuel is dangerous when jumping (see Jump Travel). It typically takes 1D hours to refuel a ship.

A ship with fuel scoops may gather fuel from bodies of water using hoses. It may also scoop hydrogen from a gas giant, requiring a Difficult (10+) Pilot check (1D hours, DEX). Fuel gathered in the wild is unrefined but a ship with fuel processors may refine it.

JUMP TRAVEL

Jump travel is the only known means by which a vessel may travel faster than light. To jump, a ship creates a bubble of hyperspace by means of injecting high-energy exotic particles into an artificial singularity.

The singularity is driven out of our universe, creating a tiny parallel universe that is then blown up like a balloon by injecting hydrogen into it. The jump bubble is folded around the ship, carrying it into the little pocket universe. This new universe is short-lived and eventually collapses, precipitating the ship back into normal space several light-years from its original position.

A ship can only safely jump when it is more than 100 diameters distant from any object larger than the ship. A vessel could only jump away from Earth, for example, when it is more than 1.27 million kilometres distant (as well as 140 million kilometres away from Sol and 300,000 kilometres away from the Moon). Gravity can cause a jump bubble to collapse prematurely, bringing a ship back into normal space early – so, if a ship tried to jump from Earth to Mars when the Sun was between the two, the vessel would fall out of jump space as soon as it came within 100 diameters of the Sun.

PREPARING FOR JUMP

To jump, the following procedures must be performed as a task chain using Astrogation and Engineer (j-drive) checks:

Astrogation: The jump needs to be plotted. This is an Easy (4+) Astrogation check (1D x 10 minutes, EDU), modified by the jump distance (thus, a jump covering four parsecs gives DM-4 to the check). If the check is failed, then the astrogator must plot the jump again. Astrogation can be done in advance (a jump is normally plotted while the ship is travelling out to the 100-diameter distance).

Jump!: Firing the jump drive requires an Easy (4+) Engineer (j-drive) check (1D x 10 minutes, EDU), modified by the task chain of the original Astrogation check and the following modifiers:

- Jump drive not maintained: DM–1 per month behind maintenance.
- Using unrefined fuel: DM–2.
- Still within the 100-diameter limit: DM–4.

If this check is failed, then the ship misjumps.

Divert Power: A jump drive requires a tremendous amount of power to function, which must be supplied by the ship's power plant. On many vessels, especially older ships, the power plant strains to provide this much, leading to the tradition of 'jump dimming' where non-essential systems including lighting is shut down to allow for jump. If insufficient Power is available, the jump drive cannot be activated.

JUMP TRAVEL

When making a jump, a ship will use an amount of fuel equal to 10% of its hull tonnage for every parsec jumped. For example, if a 200-ton ship makes a two parsec jump, it will require 40 tons of fuel (10% of 200 tons = 20, multiplied by two parsecs = 40 tons). A jump carries the vessel a number of parsecs equal to the jump number. Jumps of less than one parsec (less than three light years or one hex on a sector map) are possible and count as jump-1 for the purposes of Astrogation checks and fuel expenditure. Regardless of how far the ship jumps, it always stays in jumpspace for roughly one week (148 + 6D hours).

While in jumpspace, the ship is completely and utterly cut off from the universe. It hangs in a shimmering bubble of boiling hydrogen, a pocket dimension from which nothing can escape. It cannot communicate with the normal universe, not even by psionic means. It is utterly alone.

When the ship exits jumpspace after an accurate jump, it tends to arrive close to the target world but outside or on the verge of the 100-diameter limit. Inaccurate jumps dump the ship somewhere in the inner system, requiring a long space flight.

MISJUMPS

On rare occasions, normally because of a lack of maintenance or using unrefined fuel, a ship can misjump. Many misjumps are lethal, causing the jump bubble to collapse early or for time in the bubble to flow differently, so that trillions of subjective years pass inside the bubble and all that comes out the other end is hard radiation caused by protons exceeding their half-life.

If the Engineer (j-drive) check made to initiate a jump is failed by an Effect of –1, the ship will arrive in the target system but appear 1D days later than normal. At the Referee's option, roll an additional 1D – this is the number of extra days the ship spends in jumpspace from the point of view of the crew (the relativity error generated by this misjump causes a difference in perceived time aboard the ship and the rest of the universe).

If the Engineer (j-drive) check made to initiate a jump is failed by an Effect of -2, the ship arrives in the target system but is a number of 100-diameters away from the intended world multiplied by 1D.

If a worse Effect is rolled, the ship ends up 1D x 1D parsecs in a random direction, potentially in deep (and empty) space.

REMOTE OPERATIONS

Some ships carry a variety of drones to enable their crew to perform tasks without leaving their ship or manoeuvring their vessel into hostile territory. Drones are piloted from their mother ship with the Electronics (remote ops) skill and can operate at up to Medium range (see page 19).

Drones are typically man-sized and have gravitic drives that allow them to operate in both space and atmospheres. However, while they can land on a planet, they do not have the power to travel from the surface to orbit and must be recovered manually. The scout/courier featured in this book carries probe drones, which are for surveying planetary surfaces. Probe drones are also capable of surveying orbiting satellites, derelicts and other space debris and can also be used as communications relays.

There are other types of drones as well: mining drones, repair drones and others. Mining drones are common on belter and mining ships. Repair drones are common on military ships.

REPAIRS

Damage to a ship falls into two categories – hull damage and critical hits. See the *Space Combat* chapter for how both are applied to a ship.

Critical Hit: A critical hit can be jury-rigged back to use (see page 56) but stops functioning after 1D hours. Properly repairing a critical hit requires an Engineer or Mechanic check (1D hours) and spare parts. The Effect of the check determines how many spare parts are required, minus the Severity of the critical hit. Spare parts can be purchased at the cost of Cr100000 per ton.

Critical Hit Repair

Engineer or Mechanic Effect	Spare Parts Required
1	1 ton
2	0.8 tons
3	0.6 tons
4	0.4 tons
5	0.2 tons
6	None

SENSORS

All spacecraft have advanced sensors that allow them to spot potential threats and items of interest from possibly thousands of kilometres distant. They have limited automatic operation but, as always, it requires a human present to actually interpret the information in a useful way.

Under normal circumstances, an Electronics (sensors) check is all that is required to detect and identify a target that has moved into range of sensors. What information can be determined from this depends on the type of sensors employed.

The kind of sensors a ship possesses depends on the sensor package installed. Distances between ships and other objects in space is determined by range bands, as shown on the Range Bands table on page 52. Once the range has been determined, consult the Sensor Target and Sensor Detail tables to determine what information can be gleaned on the target from the sensors on board.

SENSOR TYPES

The following are the types of sensor commonly found on spacecraft across Tech Levels:
Visual (all): Electronically-enhanced telescopes.
Thermal (all): Picking up heat emissions.
Radar/Lidar (all): Detects physical objects. Active use bounces beams off a target and thus makes it easier to be seen (DM+2 to Electronics (sensors) checks to be detected in return).
NAS (advanced): Neural Activity Scanner. Detects neural activity and intelligence.
Densitometers (improved): Determines internal structure and makeup of an object through its natural gravity.

Sensor Target

Range	Visual	Thermal	EM	Active Radar/ Lidar	Passive Radar/Lidar	NAS	Densitometer
Adjacent	Full	Full	Full	Full	Limited	Full	Full
Close	Full	Full	Full	Full	Limited	Limited	Full
Short	Limited	Full	Limited	Full	Minimal	Minimal	Limited
Medium	Limited	Limited	Limited	Limited	Minimal	None	Minimal
Long	Minimal	Limited	Minimal	Limited	None	None	None
Very Long	Minimal	Minimal	Minimal	Minimal	None	None	None
Distant	None	Minimal	None	Minimal	None	None	None

Sensor Detail

Detail	Visual	Thermal	EM	Active Radar/ Lidar	NAS	Densitometer
Full	Fine details	Fine temperature gradations, individual heat sources on exterior	Individual systems	Fine details	Individual brain activity	Fine details
Limited	Shape and structure	Hot or cold spots	Powerful EM sources	Shape and structure	Level of activity	Internal structure
Minimal	Basic outline	Hot or cold overall	Presence or absence of activity	Basic outline	Presence or absence of activity	External structure

SHIP COMPUTERS

The computers installed on board ships to run their systems are a great deal more powerful than those commonly used planetside.

Specialised Computers

Some ships, such as the Type-S scout/courier, have specialised /bis computers that allow them to run jump software beyond their normal Processing score, as if their Rating was +5 higher. A Model 1/bis computer (normal Processing 5 but Processing 10 for Jump Control software) can therefore run Jump Control/2 (requiring Processing 10).

Ship Software

Ship software operates in exactly the same way as normal computer software but typically has a much higher bandwidth. Ship computers are fully capable of running normal software as well.

Ship Software

Program	TL	Bandwidth	Cost (MCr)	Effect
Manoeuvre	8	0	Included	Allows basic control of ship.
Intellect	11	0	Included	Allows a ship to understand and obey verbal commands.
Jump Control/1 Jump Control/2	9 11	5 10	0.1 0.2	Allows jumps of up to the specified number. Incorporates astrogation software and jump engine management.

TRAVEL TIMES

Spacecraft are extremely fast – however, space is very large and even with their advanced technology, it still takes a long time to reach destinations. Interplanetary travel takes time. See the following table for common distances and travel times:

Common Distances for Travellers

Object to Object	Distance (km)	Time at 1G	Time at 2G
World Surface to Orbit	10,000	2,000 seconds	1,414 seconds
Orbiting Satellite	400,000	211 minutes	149 minutes
Close Neighbour World	45,000,000	37.3 hours	26.4 hours
Far Neighbour World	255,000,000	88.7 hours	62.7 hours
Close Gas Giant	600,000,000	136.1 hours	96.2 hours
Far Gas Giant	900,000,000	166.7 hours	117.9 hours

SPACE COMBAT

Combat between spacecraft is similar to that between Travellers but uses a six-minute combat round (rather than six seconds). Each Traveller on board can take up a particular position or duty on board, such as pilot, gunner or engineer. In each round, every Traveller will have the opportunity to perform actions or move between positions.

COMBAT STEPS

When spacecraft fight, instead of one ship completing all of its actions before you move onto the next, as happens in combat between Travellers and vehicles, you instead go through the following steps in every combat round:

1. Manoeuvre Step: In order of Initiative, each ship manoeuvres based on its Thrust.
2. Attack Step: In order of Initiative, each ship attacks with its weapons.
3. Actions Step: In order of Initiative, ships can perform miscellaneous actions, such as repairing damaged systems, jumping out of the system or launching craft.

Once the Actions Step is complete, the combat round ends and if there are still ships fighting, a new combat round begins with the Manoeuvre Step.

Before a battle begins, it is important to note where ships are relative to one another. In general, all that is required in space is to know how far away each ship is from its opponents. Use the Range Bands table to determine the distance between opposing ships.

Range Bands

Range Band	Distance
Adjacent	Less than 1 km
Close	1–10 km
Short	11–1,250 km
Medium	1,251–10,000 km
Long	10,001–25,000 km
Very Long	25,001–50,000 km
Distant	More than 50,000 km

Most hostile encounters start at Very Long or Distant ranges, when the combatants first detect one another. However, actual combat starts when one of the combatants moves into range of their weapons, typically Long or Medium range. However, ships might get a lot closer before hostilities begin, perhaps as near as Close range if a pirate successfully pretends to be an honest merchant, for example.

INITIATIVE

Initiative is rolled once for each ship, as follows: 2D + the pilot's Pilot skill + the ship's Thrust score. Ships with better pilots and faster manoeuvre drives will therefore be quicker to act in space combat.

TACTICS (NAVAL) SKILL

In addition, the commander of each spacecraft may make a Tactics (naval) check at the start of a battle. The Effect of this check is added to their Initiative score.

MANOEUVRE STEP

In order of Initiative, each ship can allocate Thrust to either movement (closing or increasing the range between it and another ship) or combat manoeuvring (docking with another vessel, lining up a shot or dodging incoming fire). All movement and combat manoeuvring is performed by the pilot.

MOVEMENT

The amount of Thrust required to increase or decrease the Range Band between ships by one category, up or down, is shown on the Ship Movement table – the Thrust listed is the amount required to move from that Range Band to either the next closest or next furthest. A ship can spend Thrust over multiple rounds to close or open a category.

If two ships are travelling towards one another, then the proportion of their Thrusts devoted to movement are added together for the purposes of Range Band changes. If one ship is trying to escape another, then subtract the lower Thrust from the higher to work out the Range Band change – the faster ship will either gain on or pull away from the slower.

SHIP MOVEMENT

Range Band	Distance	Thrust Required	Example
Adjacent	Less than 1 km	1	Docked ships
Close	1–10 km	1	Nearby vessels
Short	11–1,250 km	2	Ships in same orbital path
Medium	1,251–10,000 km	5	Surface to orbit
Long	10,001–25,000 km	10	Near to a planet
Very Long	25,001–50,000 km	25	Within jump limit
Distant	More than 50,000 km	50	Distant ships

COMBAT MANOEUVRING

Any Thrust that has not been allocated for movement may be used for combat manoeuvring. Each point of Thrust allows a ship to do one of the following. However, each manoeuvre may only be attempted once with the exception of Evasive Action.

Aid Gunners: A pilot may attempt to aid his gunners by providing a more stable firing platform along the optimum attack vector. The pilot makes a Pilot check to start a task chain with his gunners, as described on page 16.

Evasive Action: Any remaining Thrust can be used as a reaction to dodge incoming fire. This is covered on page 55.

ATTACK STEP

Attacks are performed in Initiative order. Spacecraft weapons are fired by gunners. However, a pilot may fire any weapons in a single turret at DM-2 to the attack roll. Attacking with weapons mounted on spacecraft uses the same rules as detailed in the *Combat* chapter, with the following exceptions: Firing a spacecraft-mounted weapon uses the Gunner skill and the maximum Range of weapons is noted in Range Bands, not metres.

FIRING WEAPONS

When a ship fires at another, it declares it is going to attack and selects a target. The target may then choose to perform Evasive Action. The Traveller on gunner duty for the weapon being fired then makes an appropriate skill check and, as normal for any skill check, if they total 8+, the attack is successful and damage is dealt to the target (see Damaging Spacecraft on page 168).

The standard skill check used when making an attack from a spacecraft is 2D + Gunner (appropriate speciality) + DEX DM

Common Modifiers to Spacecraft Attacks

Bonuses		Penalties	
Short Range	+1	Long Range	-2
Using a Pulse Laser	+2	Very Long Range	-4
For every full 1,000 tons of the target	+1 (max. DM+6)	Distant Range	-6

SPACECRAFT WEAPONS

These are several common weapons fitted to spacecraft, whether as defensive systems used to deter pirates or those found on small military ships. Maximum ranges are listed in Range Bands and they cannot attack targets that lie beyond their listed Range Band. The weapons mounted to the scout/courier presented in this book are pulse lasers, described here:

Weapon	TL	Range	Damage	Cost
Pulse Laser	9	Long	2D	MCr1

DOUBLE AND TRIPLE TURRETS

Some spacecraft are fitted with double or triple turrets, which allow two or three weapons to be mounted in the same turret and may be fired together. One attack roll is made for all weapons being fired but each additional weapon adds +1 per damage dice to the final damage total. For example, if a double turret with two pulse lasers is fired, it will only make one attack roll but will deal 2D+2 damage (one additional pulse laser adding +1 per damage dice).

DAMAGING SPACECRAFT

Once the total amount of damage a weapon is causing has been calculated, apply the Effect of the attack roll to the damage rolled and subtract the Armour of the spacecraft. The remaining damage is the total that is removed from the spacecraft's Hull. Once the Hull

Critical Hit Effects

	Severity					
Location	**1**	**2**	**3**	**4**	**5**	**6**
Sensors	All checks to use sensors suffer DM-2	Sensors inoperative beyond Medium range	Sensors inoperative beyond Short range	Sensors inoperative beyond Close range	Sensors inoperative beyond Adjacent range	Sensors disabled
Power Plant	Power reduced by 10%	Power reduced by 10%	Power reduced by 50%	Power reduced to 0	Hull Severity increased by +1. Power reduced to 0	Hull Severity increased by +1D. Power reduced to 0
Fuel	Leak – lose 1D tons of fuel per hour	Leak – lose 1D tons of fuel per round	Leak – lose 1D x 10% of fuel	Fuel tank destroyed	Fuel tank destroyed, Hull Severity increased by +1	Fuel tank destroyed, Hull Severity increased by +1D
Weapon	Random weapon suffers DM–1 when used	Random weapon disabled	Random weapons destroyed	Random weapon explodes, Hull Severity increased by +1	D3 random weapons explodes, Hull Severity increased by +1	1D random weapons explodes, Hull Severity increased by +1
Armour	Armour reduced by -1	Armour reduced by -D3	Armour reduced by -1D	Armour reduced by -1D	Armour reduced by -2D, Hull Severity increased by +1	Armour reduced by -2D, Hull Severity increased by +1
Hull	Spacecraft suffers 1D damage	Spacecraft suffers 2D damage	Spacecraft suffers 3D damage	Spacecraft suffers 4D damage	Spacecraft suffers 5D damage	Spacecraft suffers 6D damage
M-Drive	All checks to control spacecraft suffer DM-1	All checks to control spacecraft suffer DM-1 and Thrust reduced by -1	All checks to control spacecraft suffer DM-1 and Thrust reduced by -1	All checks to control spacecraft suffer DM-1 and Thrust reduced by -1	Thrust reduced to zero	Thrust reduced to zero, Hull Severity increased by +1
Cargo	10% of cargo destroyed	1D x 10% of cargo destroyed	2D x 10% of cargo destroyed	All cargo destroyed	All cargo destroyed, Hull Severity increased by +1	All cargo destroyed, Hull Severity increased by +1
J-Drive	All checks to use jump drive suffer DM-2	Jump drive disabled	Jump drive destroyed	Jump drive destroyed, Hull Severity increased by +1	Jump drive destroyed, Hull Severity increased by +1	Jump drive destroyed, Hull Severity increased by +1
Crew	Random occupant takes 1D damage	Life support fails within 1D hours	1D occupants take 2D damage	Life support fails within 1D rounds	All occupants take 3D damage	Life support fails
Bridge	Random bridge station disabled	Computer reboots, all software unavailable this round and next	Computer damaged. Reduce Bandwidth –50%	Random bridge station destroyed. Occupant takes 1D x 1D damage	Computer destroyed	Random bridge station destroyed. Occupant takes 1D x 1D damage. Hull Severity increased by +1

has been reduced to zero, it is wrecked and becomes totally inoperable. Those on board find themselves without power or life support.

CRITICAL HITS

If an attack roll against a spacecraft has an Effect of 6 or higher, and it causes damage (rather than just bouncing off armour), a critical hit has been scored. Roll 2D and then consult the Critical Hits Location table. If a particular location does not apply to this spacecraft, roll again.

The Severity of the critical hit is equal to the Effect of the attack roll. Consult the Critical Hit Effects table to determine the nature of the critical hit and how it affects the spacecraft. Any extra damage caused by the effects of critical hits ignores the spacecraft's Armour.

If a spacecraft has already sustained a critical hit to a location that receives another, use the Severity of the new critical hit or the original plus one, whichever is higher, and immediately apply any new effects. Once a location has reached Severity 6, it cannot suffer any more critical hits. Instead, the spacecraft will receive 6D extra damage every time the location suffers another critical hit.

SUSTAINED DAMAGE

A spacecraft will also have its components degraded through sustaining constant damage. Every time a spacecraft sustains damage equalling 10% of its starting Hull score, roll 2D and then consult the Critical Hits Location table. The spacecraft will suffer a Severity 1 critical hit to that location

Critical Hit Location

2D	Location
2	Sensors
3	Power Plant
4	Fuel
5	Weapon
6	Armour
7	Hull
8	Manoeuvre Drive
9	Cargo
10	Jump Drive
11	Crew
12	Bridge

REACTIONS

Just as in other forms of combat, Travellers on spacecraft can perform reactions, as described here:

EVASIVE ACTION (PILOT)

The pilot of a spacecraft may dodge incoming attacks, so long as the spacecraft has unspent Thrust after movement and combat manoeuvring.

Each point of unspent Thrust will allow the spacecraft to attempt to dodge one attack. The attack suffers a negative DM equal to the pilot's skill.

ACTIONS STEP

Once all ships have resolved their attacks, their crew can perform one action each in the Actions Step. This is done in Initiative order and the actions a crewman can perform are determined by the duty they are assigned to.

IMPROVE INITIATIVE (CAPTAIN)

The captain of the spacecraft may perform a Leadership check. The Effect of this check (even if it is negative!) is applied to the Initiative of the spacecraft for the next round only.

JUMP (ENGINEER)

See Jump Travel on page 47. Jumping in combat is the same as under normal conditions but the calculations must be done in a hurry, raising the difficulty one level on both the Astrogation and Engineer (j-drive) checks to bring the time down to 1D minutes (within one combat round).

OFFLINE SYSTEM (ENGINEER)

Specific systems and weapons on board the ship can be powered down to reduce the energy requirement from the power plant, allowing Power to be used for other systems. A successful Engineer (power) check (1 round, EDU) allows the engineer to shut down any number of systems, freeing up Power for subsequent rounds. It requires another round to bring any of these systems back online.

OVERLOAD DRIVE (ENGINEER)

By overloading the manoeuvre drive, the engineer can lend the ship extra speed and manoeuvrability. A successful Difficult (10+) Engineer (m-drive) check (1 round, INT) will increase the ship's Thrust by +1 during the next round. If the check fails with an Effect of -6 or less, the manoeuvre drive suffers a critical hit with

Severity 1, as detailed on page 54. This check suffers a cumulative DM-2 each time it is attempted after the first. This penalty can be removed by performing maintenance on the drive, a procedure that requires Engineer (m-drive) and 1D hours.

OVERLOAD PLANT (ENGINEER)

A favourite of engineers on action vids, the power plant can be overstressed on a temporary basis to provide the ship with more Power. A successful Difficult (10+) Engineer (power) check (1 round, INT) will increase the ship's current Power by +10% during the next round. If the check fails with an Effect of -6 or less, the power plant suffers a critical hit with Severity 1, as detailed on page 54. This check suffers a cumulative DM-2 each time it is attempted after the first. This penalty can be removed by performing maintenance on the power plant, a procedure that requires Engineer (power) and 1D hours.

REPAIR SYSTEM (ENGINEER)

An engineer can attempt to repair the effects of a critical hit by making an Average (8+) Engineer check (1 round, INT or EDU) with a negative DM equal to the Severity of the critical hit. A cumulative DM+1 is gained every round the Traveller works on the same critical hit. If the spacecraft receives a critical hit to the same location, the Traveller must start again from the beginning with no positive DM.

Note that only the effects of the critical hit can be repaired and these quick repairs will only last for 1D hours. Any Hull damage or destroyed equipment and weapons cannot be repaired this way and will require the spacecraft to leave combat.

SENSOR LOCK (SENSOR OPERATOR)

An improved target lock may be obtained on an enemy spacecraft with a successful Electronics (sensors) check. Attacks made by the spacecraft against this target gain DM+2.

REASSIGNMENT (ANY)

Any Traveller may elect to change their assigned duty instead of performing any other action. They do nothing else in this round but will have adopted their new duty in the following round.

AIR/RAFT

An open-topped vehicle supported by anti-gravity technology, Air/rafts are capeable of reaching orbit but passengers must wear vacc suits. They are ubiquitous, remarkably reliable and flexible vehicles.

NOTE: A cargo carrying version of the aircraft is available. This has Crew: 1, Passengers: 0 and Cargo: 1.5 ton.

EQUIPMENT AND WEAPONS

Autopilot (improved), Communications System (improved), Computer/1, Entertainment System, Navigation System (basic), Sensor System (basic).

TL	8
SKILL	Flyer (grav)
AGILITY	+1
SPEED (CRUISE)	High (medium)
RANGE (CRUISE)	1000 (1500)
CREW	1
PASSENGERS	5
CARGO	0.25 ton
HULL	16
SHIPPING	4 tons
COST	Cr250000

ARMOUR

FRONT	10	REAR	10	SIDES	10

DECKPLAN LEGEND:

DOOR

IRIS VALVE

AIRLOCK

LIFT

IRIS VALVE UP

IRIS VALVE DOWN

IRIS VALVE UP/DOWN

G/CHAIR

COMMON AREA

FRESHER

SHIP'S LOCKER

LOW BERTH

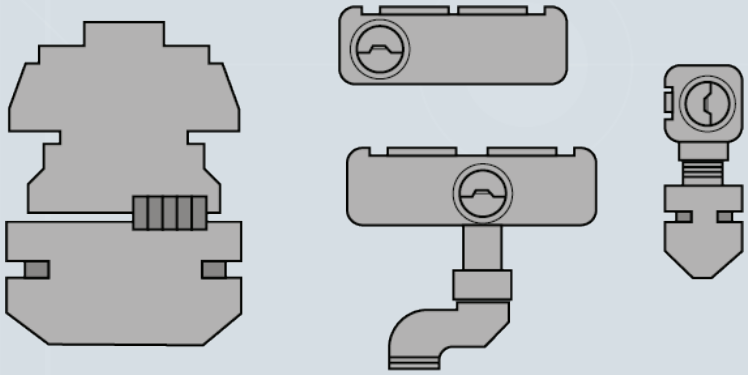
DRONES

STATEROOM BEDS

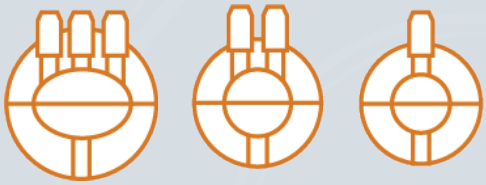
AIR/RAFT

CARGO BAY

CARGO CRANE



POWER PLANT/JUMP DRIVE/ MANOEUVRE DRIVE/MACHINERY



TURRETS

HULL

FUEL

SCOUT/COURIER

TYPE: S

The scout ship is built for exploration, survey and courier duties, with many thousands in service throughout Charted space. Despite the small 100 ton hull, the scout is faster than most merchant ships and can jump further too.

While multiple crew positions are technically required, it is standard practice for a scout to be crewed by just one or two highly skilled individuals who understand the requirements needed for self-sufficiency.

TL12		TONS	COST (MCr)
Hull	100 tons, Streamlined	—	6
Armour	Crystaliron, Armour: 4	5	1.2
M-Drive	Thrust 2	2	4
J-Drive	Jump-2	10	15
Power Plant	Fusion, Power 60	4	4
Fuel Tanks	J-2, 12 weeks operation	23	—
Bridge		10	0.5
Computer	Computer/5bis	—	0.045
Sensors	Military Grade	2	4.1
Weapons	Double Turret (pulse lasers)	1	2.5
Systems	Fuel Scoop	—	—
	Fuel Processors (40 tons/day)	2	0.1
	Probe Drones x10	2	1
	Docking Space (4 tons)	5	1.25
	Air Raft	—	0.25
	Workshop	6	0.9
Software	Jump Control/2	—	0.2
	Library	—	—
	Manoeuvre	—	—
	Intellect	—	—
Staterooms	Standard x4	16	2
Cargo		12	—

Crew:

Pilot, Astrogator, Engineer

Hull: 40

Running Costs

MAINTENANCE COST

Cr3228/month

PURCHASE COST

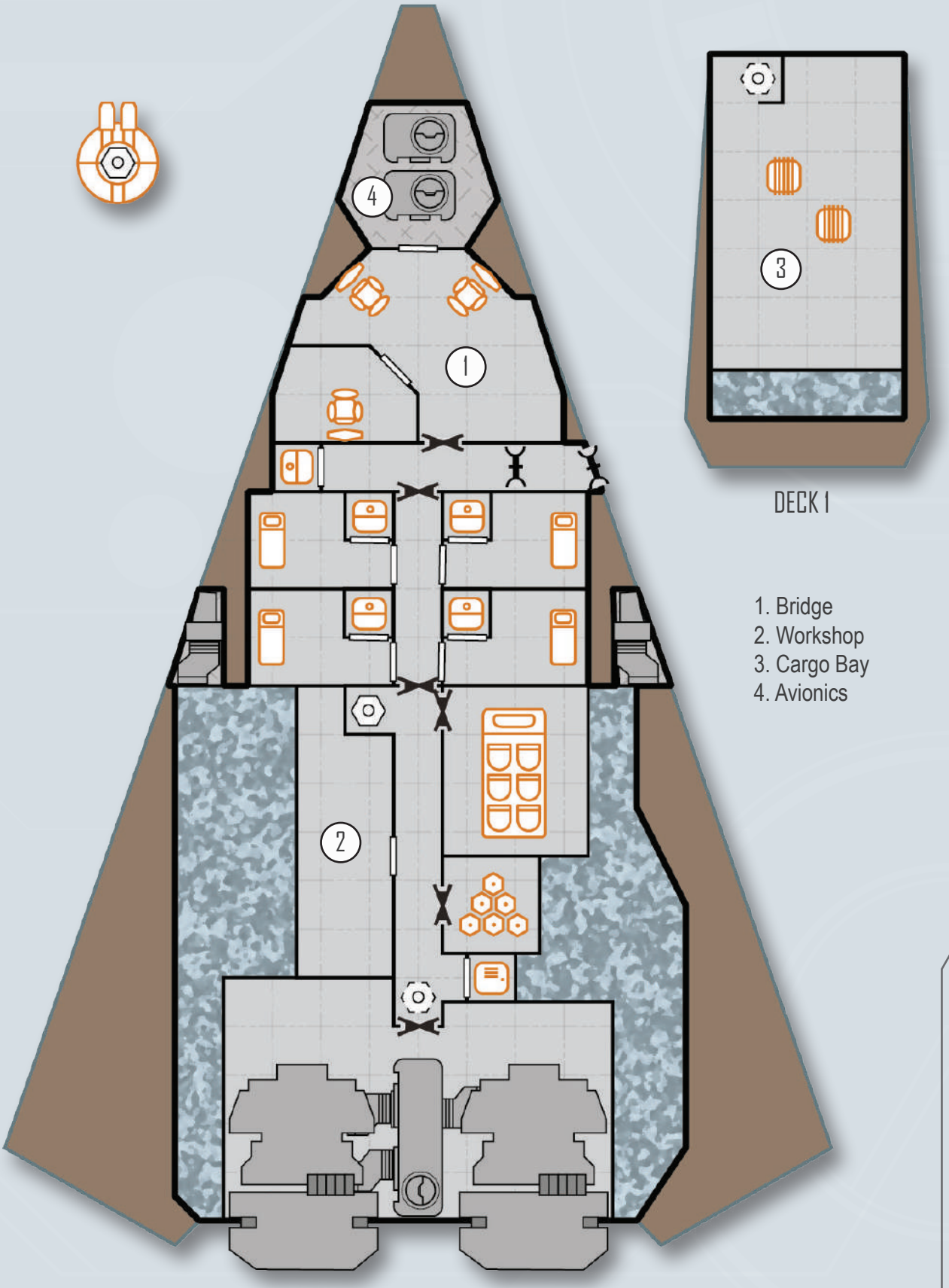
MCr38.7405

Power Requirements

Basic Ship Systems	20
Manoeuvre Drive	20
Jump Drive	20
Sensors	2
Weapons	9

SCOUT

TYPE: S



1. Bridge
2. Workshop
3. Cargo Bay
4. Avionics

WORLD AND UNIVERSE CREATION

A universe must be created for Travellers to explore and find adventure. Many Referees use published universes to save themselves time. However, some Referees prefer to create their own universes. This chapter shows you how.

SECTORS AND SUBSECTORS

A universe is mapped in convenient segments, called subsectors. Each subsector is an area of hexagonal cells measuring eight hexes by 10 hexes. Since the recommended scale is one parsec (equal to 3.26 light years) per hex, the subsector covers an area 10 parsecs by eight parsecs.

Sixteen subsectors (arranged in four rows of four subsectors each) form a sector, about the largest practical size for a *Traveller* campaign.

Mapping subsectors consists of two sequences: star mapping and world design. Star mapping examines each hexagon in a subsector grid and determines if there is a star system present and whether there are starports, bases and fuel for starships present. This information is coded onto the subsector hexes and serves as a guide to the Referee and Travellers during interstellar travel. World design examines the single most important world in each system and determines basic characteristics for it.

Note that not all universes will require the creation of a subsector or sector. Indeed, entire campaigns can be set in just one star system, on a single world or even within a single city.

STAR MAPPING

In order to create a subsector, the Referee uses a blank subsector map and dice to determine the presence of systems, starports and bases. This format should be used to allow Travellers and Referees to note information that would normally be available to them. The Referee may elect to omit some information and only allow it to be inserted after the Travellers have determined it for themselves.

World Occurrence: There is a basic one-half chance that one world (and its attendant stellar system) will be in a hex on a subsector or sector map. Systematically check each hex, throwing 1D and marking the hex with a circle if the result is a 4, 5 or 6. This indicates that a world of note or interest is present; otherwise, leave the hex blank.

The Referee may elect to alter the normal chances of worlds, making them more frequent or less frequent to correspond to specific regions of the galaxy. A 50% density (no DM) is appropriate for most areas. Apply DM-2 for rift (all but empty) sectors, DM-1 for sparse sectors and DM+1 for densely populated sectors.

Starport Type: Many worlds have starports, their presence being essential to interstellar trade and commerce. See Starports, page 69.

Bases: Stellar systems may have bases for military forces, the navy, the scouts or other arms of interstellar government. See Bases, page 71.

Bases also help determine political boundaries in the sector. An interstellar government places bases along its borders to guard against aggression from rival states or to control local systems. The presence of multiple bases within a few parsecs might indicate a contested border or a mighty stronghold.

Gas Giants: A star system might have one or more gas giant planets (similar to Jupiter or Saturn). The presence of a gas giant allows streamlined starships to refuel by skimming; this eliminates fuel cost for the vessel and increases profit. It also allows refuelling at systems that do not have starports. Refuelling in this fashion requires 1D days to travel to the gas giant and commence refuelling. Fuel gained by skimming is unrefined. Gas giants are relatively common. Roll 9- for a gas giant to be present in the system. If one is present, mark the system hex in accordance with the world format.

System Name: Each system is generally named for the primary world within. This name should be decided upon by the Referee and placed in the hex for identification.

Polities: Worlds may be independent or part of a larger polity that spans a system or more. Polities range from loose confederations of a few worlds with common trade or defence policies or cultural links, to vast star empires containing thousands of systems and trillions of citizens. Polity borders should be drawn on the map. Larger polities often have sub-domains, which could also be marked.

Communications Routes: Within the subsector, local governments will have established communications routes connecting some (but not all) worlds. These routes serve as a conduit for messages between businesses and governments, as well as people. They also serve as the basic routes that liners and large freighters travel. The Referee should examine the subsector map and connect key worlds with communications routes. If the subsector is an isolated community, the routes might not leave the map; if it is part of a larger confederation or empire, the routes will probably leave the edges to join with other parts of the sector. Use starports as guides when drawing communication routes – in general, the best routes are the shortest connections between Class A starports and naval bases.

Communications routes should be carefully drawn so as to avoid making all parts of the subsector accessible; a subsector should have some areas as backwaters for exploration and adventure. Communications routes are drawn as single lines connecting hexes on the subsector grid.
The subsector or sector map, once generated, shows

Reading World Profiles

Traveller describes planets using a single line of hexadecimal code. Hexadecimal codes use base 16 notation; digits 0 through 9 are represented by common numbers; digits 10 to 15 are represented by letters A through F. A is equal to 10, B equal to 11 and so on – the highest digit is F, equal to 15. In some unusual cases, further sequences of letters can also be used, such as using G as a digit to describe TL16. Once you get used to this method of laying out the characteristics of a planet, it becomes easy to decipher during play. This is an example world:

Cogri 0101 CA6A643-9 N

The first component is the name : Cogri The second component (the four digit number) is its hex location on a sector map. : 0101 The next string of digits denote, in order:

- Starport quality : C
- Size : A
- Atmosphere type : 6
- Hydrographic percentage : A
- Population : 6
- Government type : 4
- Law Level : 3
- Tech Level : 9

The next component marks any bases present – on the world – examples include N for Naval Base and S for Scout Base: **N**

the distribution of star systems in space and their relationships to each other in terms of relative distance and commercial space-lane connections.

WORLD CREATION

The term world refers to the various bodies contained in a star system; it includes planets, satellites and asteroid belts. For example, the single most important world in a system may not be a planet at all but a satellite of a gas giant or maybe a planetoid within an asteroid belt.

The worlds contained in star systems on the subsector map may be further classified in terms of their gross physical characteristics and their effects on persons living on them or travelling to them. These codes indicate specific facts about a world through the use of a numeric code.

This world creation process applies only to the single most important and most travelled world in a star system; additional planets in a system can be created by the Referee as necessary.

The basic planetary codes are Size, Atmosphere, Hydrographics, Population, Government, Law Level, Technology Level, Starport and Bases, and are generated using 2D each, with DMs applied based upon the results of other codes. These codes establish the basic identity of a world, as shown in Reading World Profiles. Additional information can be created, and should be, to more fully describe a world. When creating worlds, a subsector table containing world name, location, profiles and other basic data should be compiled. This should be available to Travellers who journey through the subsector and is assumed to be routinely available information. In addition, the Referee should create other information that may be pertinent. This may include details of other planets in the star system, radiation emissions from the star, types of terrain present on the planetary surface, unique encounter tables, data on flora and fauna, industrial or agricultural capacity, social structure and government, and possibly actual maps of the planetary surface.

SIZE

The Size code for worlds ranges from 0 to 10 and is determined by rolling 2D-2. Size measures a world's diameter in thousands of kilometres and the bigger a planet, the higher its gravity. The values for gravity in the Size table assume that the world has a density similar to that of Earth. Worlds like gas giants have a lower gravity than their size would indicate, while extremely dense worlds would have a higher gravity. Intelligent species (sophonts) are unlikely to evolve naturally on worlds smaller than Size 4 or 5. Larger planets tend to imply larger populations, as there is more room for expansion.

Size

Size	Diameter	Example	Surface Gravity (Gs)
0	Less than 1,000 km	Asteroid, orbital complex	Negligible
1	1,600 km	Triton	0.05
2	3,200 km	Luna, Europa	0.15
3	4,800 km	Mercury, Ganymede	0.25
4	6,400 km	Mars	0.35
5	8,000 km		0.45
6	9,600 km		0.7
7	11,200 km		0.9
8	12,800 km	Earth	1.0
9	14,400 km		1.25
10 (A)	16,000 km		1.4

Worlds of Size 1 or less are asteroids, planetoids, orbital complexes, space stations and other small satellites, and much too small to retain a breathable atmosphere. They are uninhabitable by most forms of life without technological support.

HIGH AND LOW GRAVITY WORLDS

Worlds where the gravity is 0.7 G or less (Size 6 or less) are low gravity worlds. Common features include improbable-looking rock formations, thin and spindly life forms and flying as a common form of locomotion (assuming the atmosphere is thick enough to support flyers). The effect on Travellers is detailed on page 28.

High-gravity worlds have a gravity of 1.4 G or more. They tend to be extremely dense worlds; common features include wide rocky plains, squat, muscular creatures and plant life that spreads out like lichen instead of growing up. Crawling, burrowing or swimming are the most common forms of locomotion. The effect on Travellers is detailed on page 28.

ATMOSPHERE

The Atmosphere code measures the type of atmosphere present. A planet's Atmosphere is generated by rolling 2D-7 and adding the planet's Size. Consult the Atmosphere table for specifics.

Atmosphere

Atmosphere	Composition	Examples	Pressure	Survival Gear Required
0	None	Moon	0.00	Vacc Suit
1	Trace	Mars	0.001–0.09	Vacc Suit
2	Very Thin, Tainted		0.1–0.42	Respirator, Filter
3	Very Thin		0.1– 0.42	Respirator
4	Thin, Tainted		0.43–0.7	Filter
5	Thin		0.43–0.7	
6	Standard	Earth	0.71–1.49	
7	Standard, Tainted		0.71–1.49	Filter
8	Dense		1.5–2.49	
9	Dense, tainted		1.5–2.49	Filter
10 (A)	Exotic		Varies	Air Supply
11 (B)	Corrosive	Venus	Varies	Vacc Suit
12 (C)	Insidious		Varies	Vacc Suit
13 (D)	Very Dense		2.5+	
14 (E)	Low		0.5 or less	
15 (F)	Unusual		Varies	Varies

ATMOSPHERE TYPES

Tainted: Tainted atmospheres contain elements harmful to humans, such as an unusually high proportion of carbon dioxide. A Traveller who breathes a tainted atmosphere without a filter suffers 1D damage every few minutes (or hours, depending on the level of taint), in addition to other effects.

Exotic: An exotic atmosphere is unbreathable by humans but not otherwise hazardous. A Traveller needs an air supply to breath in an exotic atmosphere without suffocating.

Corrosive: Corrosive atmospheres are highly dangerous. A Traveller who breathes in a corrosive atmosphere will suffer 1D damage each round.

Insidious: An insidious atmosphere is like a corrosive one but is so potent that it attacks equipment as well. The chief danger is that the toxic gases destroy the seals and filters on the Traveller's protective gear. An insidious atmosphere worms its way past protection after 2D hours on average, although vigilant maintenance or advanced protective gear can prolong survival times.

Very Dense: These worlds have thick N_2/O_2 atmospheres but their mean surface pressure is too high to support unprotected human life (high pressure nitrogen and oxygen are deadly to humans). However, pressure naturally decreases with increasing altitude, so if there are highlands at the right altitude, the pressure may drop enough to support human life. However, there may not be any topography high enough for humans to inhabit, necessitating floating gravitic or dirigible habitats or sealed habitats on the surface.

Low: The opposite of a Very Dense atmosphere, these massive worlds have thin N_2/O_2 atmospheres that settle in the lowlands and depressions and are only breathable there – the pressure drops off so rapidly with altitude that the highest topographic points of the surface may be close to vacuum.

Unusual: An Unusual atmosphere is a catchall term for an atmosphere that behaves in a strange manner. Examples include ellipsoidal atmospheres, which are thin at the poles and dense at the equator; Panthalassic worlds composed of a rocky core surrounded by a water layer hundreds of kilometres thick; worlds wracked by storms so intense that local air pressure changes from dense to thin depending on the current weather and other planets with unusual and hazardous atmospheric conditions.

HYDROGRAPHICS

The Hydrographic code measures the amount of surface liquid and so the amount of dry land on the world. Hydrographic percentage goes from 0 to 10, measuring the surface liquid in increments of 10%.

Hydrographics

Hydrographics	Hydrographic Percentage	Description
0	0%–5%	Desert world
1	6%–15%	Dry world
2	16%–25%	A few small seas
3	26%–35%	Small seas and oceans
4	36%–45%	Wet world
5	46%–55%	A large ocean
6	56%–65%	Large oceans
7	66%–75%	Earth-like world
8	76%–85%	Only a few islands and archipelagos
9	86%–95%	Almost entirely water
10 (A)	96%–100%	Waterworld

World Temperature

A planet's surface temperature is primarily dependent on its distance from its primary star (how much stellar radiation it receives) and how thick its atmosphere is (how much of this heat it can retain). The habitable zone is the area around a star most conducive to the development of Earth-like, habitable worlds and it is assumed that most colonised worlds will be in this habitable zone. Roll 2D for the planet's temperature, applying the DMs listed here for the Temperature table:

Atmosphere 0 or 1: No modifiers but temperature swings from roasting during the day to frozen at night
Atmosphere 2 or 3: DM-2
Atmosphere 4, 5 or E: DM-1
Atmosphere 6 or 7: DM+0
Atmosphere 8 or 9: DM+1
Atmosphere A, D or F: DM+2
Atmosphere B or C: DM+6

Optionally, the Referee may also choose to impose one of the following:

Hot edge of Habitable Zone: DM+4
Cold edge of Habitable Zone: DM-4

Temperature

2D	Type	Average Temperature	Description
2 or less	Frozen	Less than -51º	Frozen world. No liquid water, very dry atmosphere.
3–4	Cold	-51ºC to 0ºC	Icy world. Little liquid water, extensive ice caps, few clouds.
5–9	Temperate	0ºC–30ºC	Temperate world. Earth-like. Liquid and vaporised water are common, moderate ice caps.
10–11	Hot	31ºC–80ºC	Hot world. Small or no ice caps, little liquid water. Most water in the form of clouds.
12 or more	Boiling	81ºC+	Boiling world. No ice caps, little liquid water.

For normal worlds, this will be water; on worlds with corrosive or exotic atmospheres, it might be a corrosive or exotic liquid like ammonia or methane.

The Hydrographic code is obtained by rolling 2D-7 and adding the planet's Atmosphere. Some Atmospheres use the modifier listed below instead:

Size 0 or 1: Hydrographic 0
Atmosphere 0, 1, A, B or C: DM-4

If the planet's Atmosphere is not D or Panthalassic F (and thick enough to retain water under extreme circumstances), then you can also apply DMs for temperature:

Hot Temperature: DM-2
Boiling Temperature: DM-6

POPULATION

The Population code measures the planet's intelligent population. The Population code can be generalised as the number of zeroes following a one, so Population 6 indicates a population in the millions (1,000,000). Population is generated with 2D-2. However, the Referee may like to introduce extremely high-population worlds (Population B or C) at their discretion.

If a world has Population 0, it is uninhabited and so has a Government, Law Level and Technology Level of 0.

Population

Population	Inhabitants	Range	Description
0	None	0	—
1	Few	1+	A tiny farmstead or a single family
2	Hundreds	100+	A village
3	Thousands	1,000+	—
4	Tens of thousands	10,000+	Small town
5	Hundreds of thousands	100,000+	Average city
6	Millions	1,000,000+	—
7	Tens of millions	10,000,000+	Large city
8	Hundreds of millions	100,000,000+	—
9	Billions	1,000,000,000+	Present day Earth
10 (A)	Tens of billions	10,000,000,000+	—
11 (B)	Hundreds of billions	100,000,000,000+	Incredibly crowded world
12 (C)	Trillions	1,000,000,000,000+	World-city

Government

Government	Government Type	Description	Examples	Example Contraband
0	None	No government structure. In many cases, family bonds predominate.	Family, clan, anarchy	None
1	Company/ Corporation	Ruling functions are assumed by a company managerial elite and most citizenry are company employees or dependants.	Corporate outpost, asteroid mine, feudal domain	Weapons, Drugs, Travellers
2	Participating Democracy	Ruling functions are reached by the advice and consent of the citizenry directly.	Collective, tribal council, comm-linked consensus	Drugs
3	Self-Perpetuating Oligarchy	Ruling functions are performed by a restricted minority, with little or no input from the mass of citizenry.	Plutocracy, hereditary ruling caste	Technology, Weapons, Travellers
4	Representative Democracy	Ruling functions are performed by elected representatives.	Republic, democracy	Drugs, Weapons
5	Feudal Technocracy	Ruling functions are performed by specific individuals for persons who agree to be ruled by them. Relationships are based on the performance of technical activities that are mutually beneficial.	Those with access to advanced technology tend to have higher social status	Technology, Weapons, Computers
6	Captive Government	Ruling functions are performed by an imposed leadership answerable to an outside group.	A colony or conquered area	Weapons, Technology, Travellers
7	Balkanisation	No central authority exists; rival governments compete for control. Law Level refers to the government nearest the starport.	Multiple governments, civil war	Varies

GOVERNMENT

The Government code indicates a range of possible ruling systems, determined by rolling 2D-7 and adding the planet's Population code.

The Common Contraband column on the Government table determines goods such a government is likely to restrict but should not be taken as a universal rule.

LAW LEVEL

The Law Level of a planet represents the relative force of law on the world. A high Law Level indicates that visitors to the world will have their activities curtailed. Law Level determines two things in particular – what is illegal for Travellers to possess and the likelihood the Travellers will run afoul of the law. Law Level is determined by rolling 2D-7 and adding the Government code.

BANNED GOODS

Different governments ban different goods. A Traveller might be able to carry their laser rifle slung over their shoulder on one world and be arrested for carrying a simple knife on the next. Banned goods are important for smuggling. As far as Travellers are concerned, the most common restriction a government imposes is on the possession of weapons and this is reflected on the Law Level table. However, the Referee might consider the stance of a government for all of the following:

Weapons: A government that bans weapons begins with restricting weapons of terror and mass destruction, then moves onto personal weapons. Governments will also often ban armour, with a view that an overly militarised appearance simply attracts trouble.

Drugs: A government that bans drugs begins with narcotics but at higher Law Levels, medicinal and anagathic drugs may also be banned.

Government (continued)

Government	Government Type	Description	Examples	Example Contraband
8	Civil Service Bureaucracy	Ruling functions are performed by government agencies employing individuals selected for their expertise.	Technocracy, Communism	Drugs, Weapons
9	Impersonal Bureaucracy	Ruling functions are performed by agencies that have become insulated from the governed citizens.	Entrenched castes of bureaucrats, decaying empire	Technology, Weapons, Drugs, Travellers
10 (A)	Charismatic Dictator	Ruling functions are performed by agencies directed by a single leader who enjoys the overwhelming confidence of the citizens.	Revolutionary leader, messiah, emperor	None
11 (B)	Non-Charismatic Leader	A previous charismatic dictator has been replaced by a leader through normal channels.	Military dictatorship, hereditary kingship	Weapons, Technology, Computers
12 (C)	Charismatic Oligarchy	Ruling functions are performed by a select group of members of an organisation or class that enjoys the overwhelming confidence of the citizenry.	Junta, revolutionary council	Weapons
13 (D)	Religious Dictatorship	Ruling functions are performed by a religious organisation without regard to the specific individual needs of the citizenry.	Cult, transcendent philosophy, psionic group mind	Varies
14 (E)	Religious Autocracy	Government by a single religious leader having absolute power over the citizenry.	Messiah	Varies
15 (F)	Totalitarian Oligarchy	Government by an all-powerful minority that maintains absolute control through widespread coercion and oppression.	World church, ruthless corporation	Varies

Information: A government that seeks to control information begins by restricting the use of computers and computer programs, especially information-retrieval and information-control. At higher Law Levels, bringing data from offworld or even communicating with natives can be forbidden.

Technology: A government that bans technology seeks to shield its citizens from the influence of advanced technology.

Travellers: A ban on Travellers restricts the ability of outsiders to visit the world, confining them to the starport or forbidding landing entirely.

Law Level

Law Level	Weapons Banned	Armour
0	No restrictions – heavy armour and a handy weapon recommended...	
1	Poison gas, explosives, undetectable weapons, WMD	Battle dress
2	Portable energy and laser weapons	Combat armour
3	Military weapons	Flak jacket
4	Light assault weapons and submachine guns	Cloth
5	Personal concealable weapons	Mesh
6	All firearms except shotguns and stunners; carrying weapons discouraged	All of the above
7	Shotguns	All of the above
8	All bladed weapons, stunners	All visible armour
9+	All weapons	All armour

Situation	DM	Response
First approach to a planet	+0	Check
Offworlders wandering the streets of a city (once per day)	+0	Check
Offworlders acting suspiciously	-1	Check
Bar fight	-1	Apprehended
Shots fired	-2	Apprehended
Breaking and entering	-2	Investigate
Firefight involving armoured Travellers and military weapons	-4	Apprehended
Murder and carnage	-4	Investigate

THE LAW AND TRAVELLERS

A planet's Law Level can be used to determine the Travellers' interactions with the law. In each of the following situations, roll 2D, add the listed modifiers and if the total is equal to or lower than the Law Level, the Travellers are investigated or challenged by agents of planetary law enforcement.

Check: This result means the Travellers' travel documents and identities are checked by a police officer or guard, or electronically by querying the Travellers' comms. A successful Admin or Streetwise check can allay suspicion but if it is failed, the authorities move on to Investigation.

Investigate: This results in a detective or bureaucrat probing deeper into the Travellers' backgrounds. If the Travellers have a ship, it will be searched. They may be followed or have their communications tapped. They may also be questioned closely.

Apprehended: The police show up ready for a fight. Their response is generally proportional to the threat posed by the Travellers; if the Travellers are just making trouble in a bar, then most police forces use batons, stunners, tranq gas and other non-lethal weapons. If the Travellers are armoured and firing laser rifles at the palace of the planetary duke, then the police show up with the best weapons and armour available at the planet's Tech Level, possibly with the army not far behind.

Travellers arrested for a crime face punishment, determined by rolling 2D+DMs on the Sentencing table. For crimes involving smuggling banned goods, the DM is equal to the difference between the planet's Law Level and the banned goods in question. For example, laser weapons are banned at Law Level 2, so a Traveller found with a laser weapon on a Law Level 6 world would have DM+4 on the Sentencing table. Other crimes have a set DM.

Crime	DM
False Identity Law Level	-5
Destruction of Property Law Level	-3
Assault Law Level	-2
Manslaughter Law Level	-1
Murder Law Level	+0

A Traveller with the Advocate skill may attempt to reduce the severity of sentencing by making a check. If successful, reduce the Sentencing DM by the Effect of the check. A result of Exile means the Traveller must leave the planet immediately and never return.

Sentencing

2D+DM	Sentence
0 or less	Dismissed or trivial
1–2	Fine of 1D x Cr1000 (per ton of contraband)
3–4	Fine of 2D x Cr5000 (per ton of contraband)
5–6	Exile or a fine of 2D x Cr10000 (per ton of contraband)
7–8	Imprisonment for 1D months or exile or fine of 2D x Cr20000 (per ton of contraband)
9–10	Imprisonment for 1D years or exile
11–12	Imprisonment for 2D years or exile
13–14	Life imprisonment
15 or more	Death

STARPORT

Starports are the arteries of interstellar travel and commerce. These ports for spacefaring craft range in size from a landing field with a rudimentary radio beacon and hydrogen fuel still to city-sized edifices where tens of thousands of ships land daily. Many planets have only a downport, a landing zone on the ground accessible only by entering the atmosphere. Ships that cannot land at a downport are serviced by shuttles and other small craft. Worlds advanced or rich enough might have a highport, an orbiting starport. Some are equipped with space elevators or gravitic lifts connecting highport to downport.

Starports are classed from A to E. To determine the level of a starport on a planet, roll 2D and apply these DMs to the Starport Class table:

DM+1 if the planet's Population is 8+
DM+2 if the planet's Population is 10+
DM–1 if the planet's Population is 4–
DM–2 if the planet's Population is 2–

Starport Class

2D+DM	Starport Class
2 or less	X
3	E
4	E
5	D
6	D
7	C
8	C
9	B
10	B
11+	A

Starport Facilities

Class	Quality	Berthing Cost	Fuel	Facilities	Bases
A	Excellent	1D x Cr1000	Refined	Shipyard (all) Repair Highport 6+	Naval 8+ Scout 10+
B	Good	1D x Cr500	Refined	Shipyard (spacecraft) Repair Highport 8+	Naval 8+ Scout 9+
C	Routine	1D x Cr100	Unrefined	Shipyard (small craft) Repair Highport 10+	Scout 9+
D	Poor	1D x Cr10	Unrefined	Limited Repair Highport 12+	Scout 8+
E	Frontier	0	None	None	—
X	No Starport	0	None	None	—

Quality: This determines both the condition of the port itself and the level of competence of the staff. Quality may vary – it is possible to find a Class D port run by expert engineers or a Class A that has succumbed to decay. Some worlds have entirely inappropriate starports; a world that was once a centre of commerce but has now been bypassed by new trade routes might have a cavernous port capable of handling thousands of freighters now almost abandoned. A frontier installation is just a bare spot of bedrock, marked with a beacon, and is a starport in the most technical sense only.

Berthing Cost: This is the price paid weekly by any ship that wants to land or dock at the starport. Prices vary wildly between starports but tend to remain stable at each (roll once for each starport and record it for future reference).

Fuel: This refers to the fuel available for purchase – either refined or unrefined. Refined fuel costs Cr500 per ton; unrefined fuel costs Cr100 per ton but is risky to use when jumping. Bases have their own fuel-refining ability – see Bases on page 71.

Facilities: These are the starport's repair and construction ability. A shipyard allows for the construction of new vessels. A shipyard capable of building all types of ships can construct small craft (less than 100 tons), spacecraft (100 to 5,000 tons) and capital ships (more than 5,000 tons). However only a Class-A starport can construct jump-capable spacecraft.

Repair facilities allow a damaged ship to be repaired and have plenty of spare parts for most common systems. Limited repair facilities can only fix Hull damage.

Use the following modifiers when determining whether a highport is present: DM+1 if TL9-11, DM+2 if TL 12+, DM+1 if Population 9+, DM-1 if Population 6-.

Use the following modifiers when determining whether a corsair base is present: DM+2 if Law Level 0, DM-2 if Law Level 2+.

Bases: Roll 2D for each base type listed; for more details, see Bases on page 71.

TECH LEVEL

The Tech Level of the planet is determined by rolling 1D and adding DMs from the Tech Level table. Tech Level measures the average technology presence on the planet and gives an idea of local production and repair capability. Trade with offworlders may bring in advanced technology; on average, a rich individual can afford technology two or more levels higher than the planetary average. The government might also have access to higher-technology items.

A planet's technology may be one or more levels higher or lower in a particular field, such as medicine, communications, weaponry, ship construction, power generation, computers and so forth.

COMMUNICATIONS

If the planet is below Tech Level 3, then there will be no telecommunication system whatsoever except for whatever facilities the starport offers. If it is between

Tech Level

Score	Starport	Size	Atmosphere	Hydrographics	Population	Government
0		+2	+1	+1		+1
1		+2	+1		+1	
2		+1	+1		+1	
3		+1	+1		+1	
4		+1			+1	
5					+1	+1
6						
7						+2
8					+1	
9				+1	+2	
10 (A)	+6		+1	+2	+4	
11 (B)	+4		+1			
12 (C)	+2		+1			
13 (D)			+1			–2
14 (E)			+1			–2
15 (F)			+1			
X	–4					

TL4 and TL6, then it has radio and telephone communications between major cities at least but no satellite facilities. From TL7 onwards, the planet has a progressively more advanced communications grid. At TL9, it is accessible from every point of the surface (communications satellites become cheap and easy to deploy).

ENVIRONMENTAL LIMITS

Populated worlds with certain Atmospheres require a minimal Tech Level. A world can have a Tech Level lower than this limit but the population cannot maintain or repair their life support systems and are likely doomed.

Tech Level and Environment

Atmosphere	Minimum Tech Level
0 or 1	8
2 or 3	5
4, 7 or 9	3
10 (A)	8
11 (B)	9
12 (C)	10
13 or 14 (D or E)	5
15 (F)	8

BASES

In addition to the basic facilities at a starport, there may be one or more special bases at the starport or nearby in the system. These are the common types of bases but others are also possible, such as prison facilities, naval shipyards, alien embassies or consulates, and other secret operations. Some are specific to the Charted Space universe but their equivalents could be found almost anywhere.

Naval (N): A naval base is a supply depot, refuelling station, repair yard or fortress of either the Imperial Navy or sector navy. Naval vessels can obtain refined fuel and supplies here. Naval bases are guarded by armed vessels and fixed defence. Naval bases have advanced hospitals, normally available only to naval personnel. Travellers may also be able to purchase navy-surplus weapons here.

Scout (S): A scout base offers refined fuel and supplies to scout ships (including scout ships obtained by retired scouts). They are also an excellent place to pick up rumours and news.

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TRAVELLER

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